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January 1986

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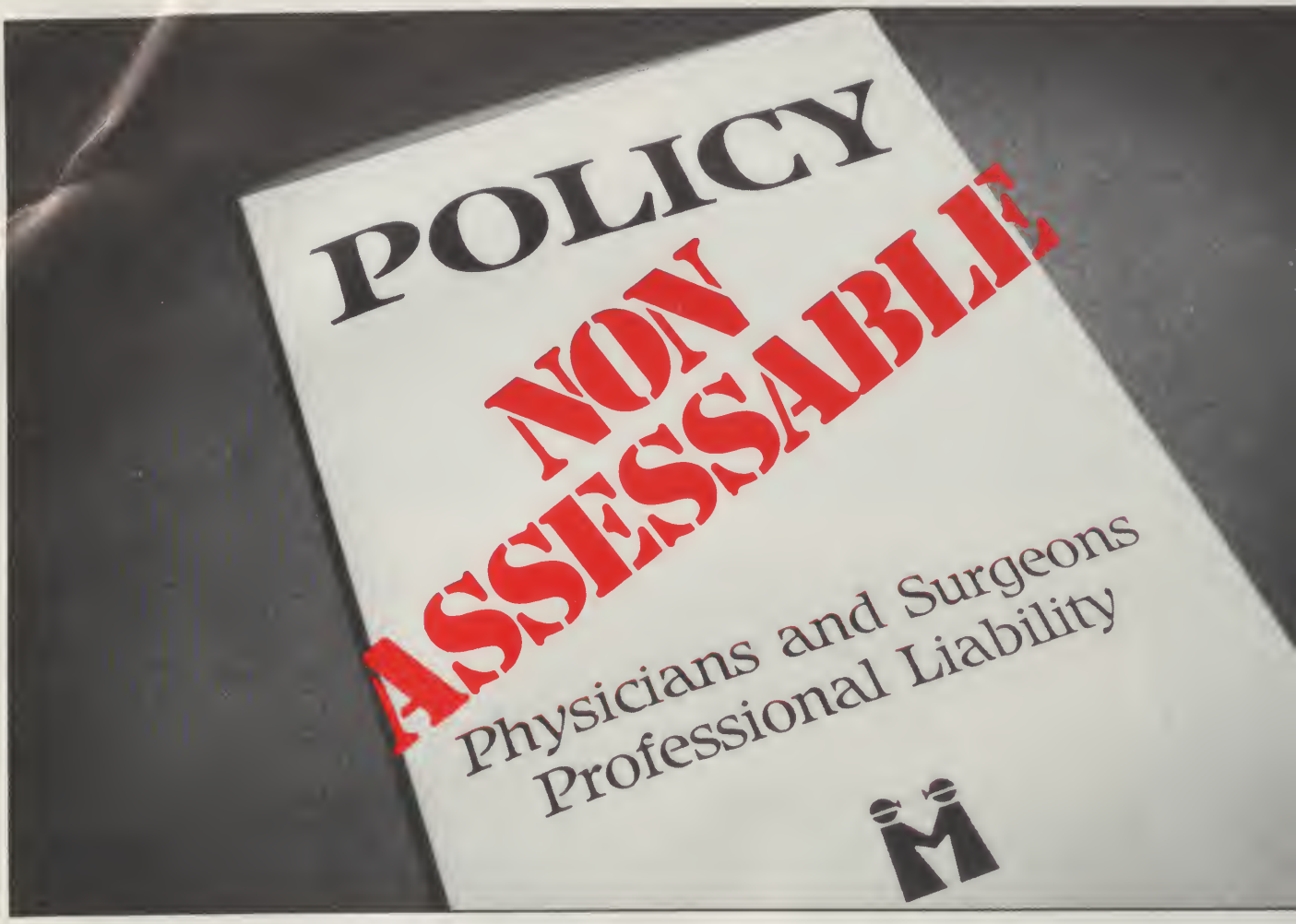
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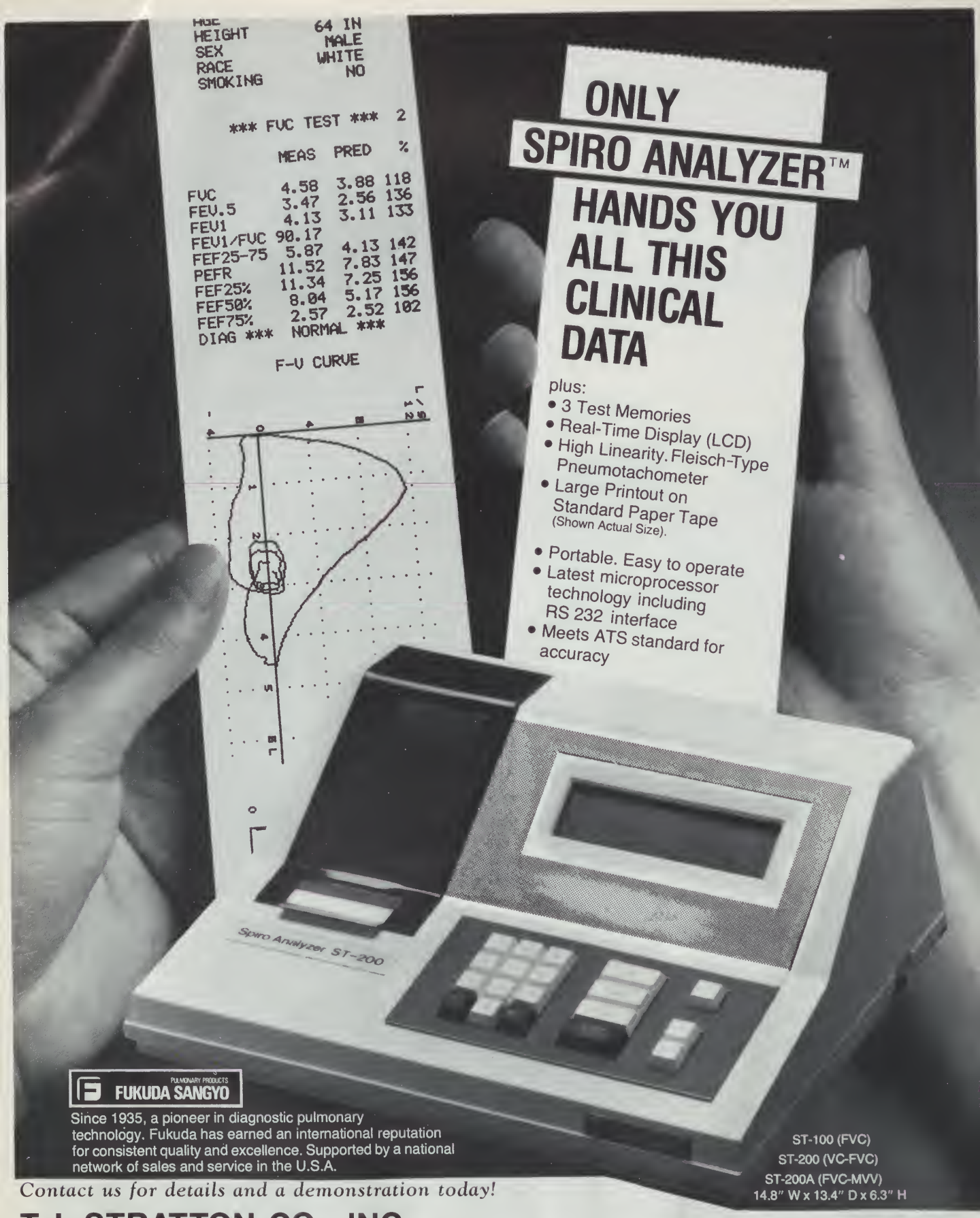
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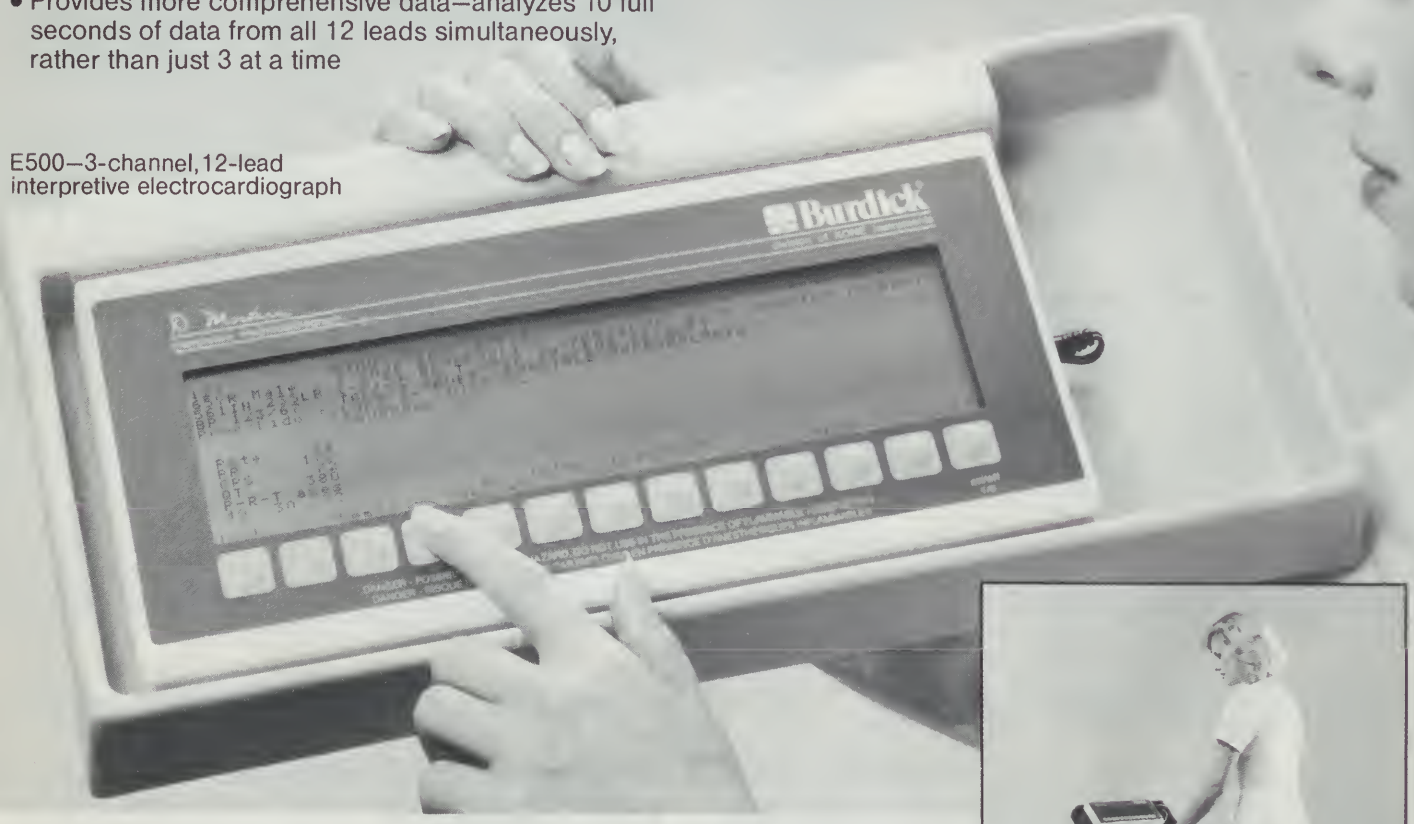
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Members in the News

Ruben F. Ballesteros MD recently was elected President of the John Staige Davis Society of Plastic Surgeons of Maryland. Dr. Ballesteros, whose office is located in Towson, is a practicing plastic, reconstructive, and hand surgeon. He is Assistant Professor of Surgery at the University of Maryland School of Medicine. Dr. Ballesteros is also Chief of Plastic Surgery at Mercy Hospital and is an active staff member at several other area hospitals.

Edward F. Lewison MD, Associate Professor of the Johns Hopkins University School of Medicine, recently was awarded the 1985 National Medal of the Maryland Division of the American Cancer Society "in recognition of his outstanding contributions to the control of cancer." In addition, Dr. Lewison was elected an Honorary Life Member of the National Board of Directors of The American Cancer Society.

Frederick J. Balsam MD
1911–1985

The specialty of Physical Medicine and Rehabilitation lost a valued member and staunch supporter on September 29, 1985 when Frederick J. Balsam MD died in his sleep. He contributed to the dissemination of knowledge of this less well-known area of medicine by instituting, and for many years editing, the Rehabilitation Medicine section of the *Maryland Medical Journal.* He encouraged local physiatrists to write articles providing practical and useful rehabilitation information for *Journal* readers.

As an assistant professor in the Department of Rehabilitation Medicine of the University of Maryland School of Medicine, Dr. Balsam participated in the training of residents. With his wife, he became a member of the School's Presidents' Club by establishing a fund to provide Departmental summer fellowships for medical students.

Dr. Balsam graduated from the City College of New York and received the MD degree from the University of Lausanne, Switzerland. He served in Europe during World War II as a captain in the U.S. Army Medical Corps. After the war he worked for the Veterans' Administration in several hospitals and in the Central Office. Later, he was a consultant in Physical Medicine and Rehabilitation for the Disability Program of the Social Security Administration. He retired from the position in 1977.

Following retirement Dr. Balsam continued his volunteer work with the Rehabilitation Medicine Department and his lifelong interest in medicine by attending weekly conferences and lectures at several local institutions.

Dr. Balsam was a member of many medical societies including the American Medical Association, the Medical and Chirurgical Faculty, Baltimore County Medical Society, and the Congress of Rehabilitation Medicine. He had served as President of the Washington-Baltimore Society of Physical Medicine and Rehabilitation and as a consultant to the medical committee of the President's Committee on Employment of the Handicapped.

Dr. Balsam's efforts on behalf of the *Journal* will be missed.

H. Gray Reeves MD
1927–1985

H. Gray Reeves MD, Salisbury, MD, a prominent surgeon and developer of commercial real estate, died October 20, 1985. Dr. Reeves died at St. Thomas Hospital in London, England, as the result of a heart attack, while vacationing in England with his wife, Shirley Ward Reeves.

Born in Atkinson, NC, he was raised in New Bern, NC. He graduated from Wake Forest College in 1947 and received the MD degree from the University of Maryland in 1951. He interned and took general surgery training at the University Hospital from 1951 to 1955. From 1955 to 1957, he served as a captain in the U.S. Air Force. He again took general surgery training at University Hospital until July 1958 then moved to Salisbury and began his practice that same month. Dr. Reeves was an attending surgeon at Peninsula General Hospital Medical Center in Salisbury, where he was chief of general surgery from 1970 to 1980.

He was a member of the board of trustees of Peninsula General Hospital Medical Center since 1973, serving as chairman from 1982 to 1985, the first physician ever to hold this office. He was named honorary trustee of the hospital in February 1985.

Among his professional involvements, he served as past-president of the Wicomico County Medical Society in 1962, as president of the University of Maryland Surgical Society, and as a member of the American Board of Surgery, the Fellow American College Surgeons, the Medical and Chirurgical Faculty of Maryland, and the Alpha Omega Alpha Honor Society. At his death he was president of the board of directors of Maryland State Bank in Salisbury.

His awards include the Special Merit Award for aggressive leadership and faithful service as president of the Salisbury Area Chamber of Commerce and a proclamation for his service as chairman of the Peninsula General Hospital Medical Center Board of Trustees. He also received recognition from the governor of Maryland for his nine years' service on the board of trustees for the state universities and colleges of Maryland.

In addition to his parents, he is survived by his wife, Shirley Ward Reeves, and three sons, Mark Talmadge Reeves, Henry Gray Reeves, III, and John Patrick Reeves, all of Salisbury. Another son, Richard Gray Reeves, died in November 1982.

The family suggests that contributions in Dr. Reeves memory be made to Peninsula General Hospital Medical Center's Health Science Library, Development Office, 100 East Carroll St., Salisbury, MD 21801.

Baltimore City Medical Society

Our October meeting began with the election of a large number of new members, many of them faculty from the medical schools.

J.D. Drinkard MD, Med-Chi president, spoke of the state society's activities in several fields. Our efforts to prevent child abuse, particularly via Boards of Education programs, have brought cooperation with the legal fraternity. He announced a symposium on "Physicians in Trouble" to help physicians become more aware of the many ways they can help each other. He assured us planning is focused on the approaching session of the Assembly to ameliorate the liability insurance turmoil.

Thomas Connor MD, for the Professional Education Committee, introduced the speaker. John A. Kastor MD is Professor and Chairman, Department of Medicine at the University of Maryland Medical School.

Dr. Kastor's topic, The Running of a Department of Medicine in the 1980s, described his career relocation from research to pedagogue. His admiration for his predecessor, Dr. Woodward, was expressed in many ways. Yet he has found some areas where he deemed his large staff could be deployed better. Changing things slowly, rearranging some priorities, and stressing student education seem to be the ways he wants to go.

CONRAD ACTON MD

Insurance Monitor

Supreme Court Upholds Cap on Awards

The U. S. Supreme Court recently upheld a 1975 California law that set a $250,000 cap on awards for pain and suffering, inconvenience, and other noneconomic losses in malpractice suits. Under California law, unlimited damages may be awarded for economic losses, including actual medical expenses and lost wages.

The 8-to-1 vote apparently clears the way for other states to enact similar limitations. Eleven states, including Virginia, currently have some form of cap on malpractice awards.

• • •

New Jersey Task Force

In an effort to contain the rising cost of medical malpractice insurance, a 15-member task force of the New Jersey Insurance Department recommended that the state Legislature change the statute of limitations to shorten the time in which malpractice suits could be filed.

Under current law, New Jersey adults must file suits within two years of discovery of an injury. The proposed law would give adults four years from the date of incident to file a lawsuit, except in cases of fraud or cases in which a foreign object was left inside a surgical patient.

The task force (composed of doctors, lawyers, representatives of insurance companies, and others) also recommended that plaintiffs be prevented from being paid a second time for losses covered by other insurance sources and that plaintiffs be required to file an affidavit of reasonable cause within 60 days of filing a malpractice suit.

Hospital Claims

According to The St. Paul Fire and Marine Insurance Company, the nation's largest medical malpractice carrier, the number and severity of hospital malpractice claims are rising. The top ten malpractice claims against hospitals are, in order:

Bad result
Delayed or omitted treatment
Injury to adjacent part of body
Patient fall (bed related)
Miscellaneous treatment issues
Incorrect treatment
Wrong diagnosis
Infection, contamination, or exposure
Patient fall (ambulatory)
Misinterpreted result

• • •

Hospital Settles Brain Damage Suit

A 9-year-old Chicago boy suffered severe brain damage when he nearly drowned at a pool party. Because the party was hosted by the chief of cardiology of an area medical center and attended by the physician's hospital employees, the boy's attorneys argued that the medical center was liable for damages. The hospital's settlement will involve payment of $7 million to $20 million, depending on the boy's life span.

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Maryland Oncology Newsletter

Neuro-Oncology

Management of neurological tumors requires a multidisciplinary approach involving neurosurgery, medical neurology, radiation oncology, and medical oncology. This must be supported by sophisticated diagnostic and therapeutic equipment to achieve good results in treatment and to continue research for new therapeutic modalities. In addition, supportive patient care plays a major role in the outcome of such an approach.

The Neuro-Oncology Service at the University of Maryland Hospital (UMH) was established in 1978. A multispeciality group dedicated to the management of tumors of the brain and spine, the service comprises members of the division of neurological surgery, University of Maryland Cancer Center (UMCC), the department of radiation oncology, and the department of neurology. Patients are evaluated, and diagnostic and therapeutic plans are developed for each patient. Close contact is maintained with the referring physician, who is kept abreast of the patient's course.

The Division of Neurological Surgery has had extensive experience with aggressive treatment of central system tumors. Over 150 craniotomies for brain tumors were done at the University of Maryland Hospital last year. Operating suites are fully equipped for the most complex procedures. The CO_2 laser has been in constant use for several years for precise removal of tumors of the CNS. Ultrasonic aspiration and intraoperative ultrasound also are available.

CT guided stereotactic surgery using the Leksell system has been in use for two years. This technique allows precise and safe biopsy of inaccessible and small lesions of the brain. This technique also is used for the stereotactic implantation of radioactive sources into brain tumors.

An eight-bed neurosurgical intensive care unit located on the neurosurgical patient floor is an integral part of patient care. Within this unit is one of the first installations in the country to handle patients with radioactive implants in brain tumors.

The first phase clinical trial of microwave interstitial hyperthermia was done at the UMH. With arrival of new instrumentation, this promising modality will be reincorporated into the treatment of brain tumors. Hyperthermia, beyond its own effect on tumors, enhances the effects of chemotherapy and radiation therapy. New protocols with the patient receiving simultaneous exposure to hyperthermia, chemotherapy, and/or radiation have been developed.

Work on the chemotherapy of CNS neoplasms has a long history at the UMH; early work was done at the Baltimore Cancer Research Center. Its successor, the UMCC, continues this work. Clinical and laboratory evaluations of chemotherapy directed toward CNS neoplasms continues. Currently BCNU is the mainstay of the chemotherapy of primary brain tumors. AZQ and spirohydantoin mustard, two drugs designed to penetrate the blood brain barrier, and CBDCA, a new platinum derivative, are being evaluated in clinical use.

Radiation Oncology is an integral part of the treatment of tumors of the central nervous system. Treatment planning is done using computer-assisted computerized axial tomography. Conventional external radiation is delivered by a Cobalt source, a 6 MEV linear accelerator, and a 20 MEV linear accelerator with electron capacity.

The implantation of radioactive sources (interstitial radiation) into brain tumors is now a routine procedure at the University of Maryland. Interstitial radiation allows further radiation to recurrent brain tumors. Temporary implantation of Iridium 192 delivers 5000r of local radiation to a tumor bed. Iridium is placed into tumor by computer-assisted stereotactic surgery; the patient needs only local anesthetic. In tumors with a less aggressive growth pattern, permanent implantation of Iodine 125 is done at the time of craniotomy.

The Neuro-Oncology Service meets each Monday to discuss new consultations, ongoing research, and clinical results. Two neurosurgeons, two medical oncologists, two radiation oncologists, a neurologist, and neuro-oncology nurse make up the team. It has been long recognized that major advances in the treatment of CNS malignancies have and will require the optimal integration of multiple therapies. The results over the past few years have shown that this aggressive, multimodal management has led to significantly improved survival.

Interests of the group also extend to pituitary tumors, meningiomas, orbital tumors, CNS metastases, paraneoplastic syndromes, neurological complications of tumor therapy, and neurotoxicity of drugs.

For further information or referral please feel free to write to Edwin H. Bellis MD or Michael Salcman MD, Neuro-Oncology Service, at the University of Maryland Medical Systems, Baltimore, MD 21201 or call the service in Baltimore at 301-528-6034.

E. GEORGE ELIAS **MD**
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HBP Commentary

Ambulatory Blood Pressure Monitoring in Adolescents: Implications for Definition and Therapy of Hypertension

JOEL I. BRENNER MD

Twenty-four hour ambulatory blood pressure measurement has been used to evaluate a group of adolescents at the University of Maryland Medical School. The noninvasive, intermittent technique demonstrated individual diurnal variability and accurately discriminated between adolescents with normotensive parents and those with parents having a documented history of hypertension.

Dr. Brenner is Associate Professor of Pediatrics in the Division of Pediatric Cardiology at University of Maryland School of Medicine.

This column has provided descriptions of techniques used historically for blood pressure measurement.[1,2] In addition, the importance of accurate sphygmomanometry in minimizing uncertainty of casual blood pressure determination caused by measurement artifact has been emphasized.[3] Single measurements of blood pressure, however, do not address the uncertainty created by individual diurnal variability. Future elimination of both sources of error in blood pressure detection may be provided by application of microcomputer capability to accurate detection of physiologic parameters and by automatic treatment based on the measurements (as previously reported in this column).[4]

At present noninvasive, intermittent ambulatory blood pressure measurement (ABPM) is a technique that has been applied to the evaluation of adult and adolescent subjects in an effort to enhance detection and describe diurnal variability of hypertension and to evaluate its treatment.[5,6] Measurements obtained over time permit analysis of situational variability of blood pressure and allow definition of the percentage of elevated systolic and diastolic blood pressures during a 24-hour period. The combination of peak blood pressure levels plus the percentage of elevated readings over a 24-hour period may represent a more accurate predictor of the long-term risk of end organ damage from hypertension than casual measurements.

Methods

ABPM was used to study a population of adolescent subjects from a probability sample of households in Maryland. The adults had been interviewed previously and had three blood pressure measurements taken as part of two household surveys (1978 and 1982) to determine the impact of statewide coordination on high blood pressure awareness, treatment, and control (DISC Program).[7] At the time of the surveys, household members under 18 were enumerated but not interviewed. Households with adolescents were selected randomly by computer. Over 400 adolescents were selected; refusals and unusable monitoring data reduced the study sample to 252. Of the 252, only one subject was hypertensive. The 13-to-19-year-olds were divided in two groups: cases (at least one hypertensive parent), and controls (both parents normotensive). The investigators were blind to the case/control status of the study subjects.

An interview was conducted in the home with the 252 subjects, and several blood pressures were measured. Blood pressure measurement then was performed using the Del Mar Avionics PIII to record systolic blood pressure (SBP), diastolic blood pressure (DBP), and heart rate (HR) every 7.5 minutes for 24 hours. In the Del Mar instrument, a microphone over the brachial artery senses the appearance and disappearance (first and fifth phase) of the Korotkoff sounds. Time, HR, SBP, and DBP are stored in solid state memory. At the end of the 24-hour recording, the blood pressure cuff and recording device were removed and the solid state memory was read by an Avionics 1981 computer that printed out SBP, DBP, pulse pressure, and HR referenced to time in numeric and graphic form. In addition, the percent of elevated readings (%E) was reported (SBP $\geq$ 140 mmHg, DBP $\geq$ 90 mmHg).

Results

Graphic representation from two study subjects is presented in Figures 1–3. Figure 1 represents a bar graph of systolic and diastolic pressure of a single subject over a 24-hour period, with the period of sleep from 2100 to 0630 noted. The subject is a normotensive 19-year-old female. Figure 2 represents the same data expressed as hourly averages of SBP, DBP, and HR. In this example, phasic variation in blood pressure during both waking and sleeping hours can be noted: a dramatic fall in blood pressure while asleep and all "awake" blood pressures in the normal range. Figure 3 represents the hourly averages from a 19-year-old male who was the only hypertensive subject noted by usual clinical criteria at the time of blood pressure measurement in the home. He was observed to have elevated pressures throughout the majority of his waking hours during ambulatory monitoring. The sleep period (from 0100 to 0800 hours) demonstrated a fall in blood pressure to a normal range but higher than that usually obtained in a sleeping teenager. A dramatic rise in blood pressure

HBP Commentary is contributed by the Maryland High Blood Pressure Commission, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

at 0800 hours is noted, associated with awakening.

Preliminary analysis of blood pressure data obtained by this method in the study population was important not only in demonstrating individual variability of blood pressure but also in allowing comparison between the two populations. Two hundred fifty-one of our study subjects were clinically normotensive. Yet the case/control breakdown, with documented parental hypertension as the sole discriminator, demonstrates significantly higher waking SBP, DBP, and %E-SBP in cases (Table). Mean blood pressure differences are small, and values for both cases and controls were well within the normal range. However, %E-SBP is a good discriminator of presence or absence of hypertension in parents of subjects. We do not yet know if it is equally sensitive as a predictor of future hypertension. However, in the literature a correlation has been shown between baseline and later follow-up BP levels (the so-called "tracking correlation"): low BPs tend to remain low; higher levels tend to remain high and get higher as individuals grow older.[8]

Whether ambulatory monitoring proves to be more valuable than conventional measurement in establishing a diagnosis of hypertension, it may have a role in evaluating the effectiveness of therapy, including nonpharmacologic interventions.

References

1. Lewis, C. "Historical Notes: Early Measurement of Blood Pressure." *Md Med J* 34(1985):640–41.
2. Lewis, C. "Historical Notes: Measurement of Blood Pressure II." *Md Med J* 34(1985):869–71.
3. Russell, R.P.; Lewis, C.; Fedder, D.O. "Sphygmomanometry: Time to Put the Science Back into the Art." *Md State Med J* 33(1984):879–81.
4. Fischell, R.E. "A Spin-off of Space Technology: A Sensor Actuated Medication System for the Treatment of Hypertension (SAMS-H)." *Md State Med J* 33(1984):497–98.
5. Horan, M.J.; Padgett, N.E.; Kennedy, H.L. "Ambulatory Blood Pressure Monitoring: Recent Advances and Clinical Applications." *Amer Heart J* 101(1981):843–48.
6. Pickering, T.G.; Harshfield, G.R.; Kleinert, H.D.; Blank, S.; Laragh, J.H. "Blood Pressure during Normal Daily Activities, Sleep, and Exercise." *JAMA* 247(1982):992–96.
7. Brenner, J.I.; Dischinger, P.C.; Ferencz, C.; Wilson, P.D.; Berman, M.A. "Twenty-four Hour Blood Pressure Monitoring in Adolescents." *Circulation* 68(1983):396.
8. Szklo, M. "The Epidemiologic Basis for Hypertension Control." *J Public Health Policy* 1(1980):312–27.

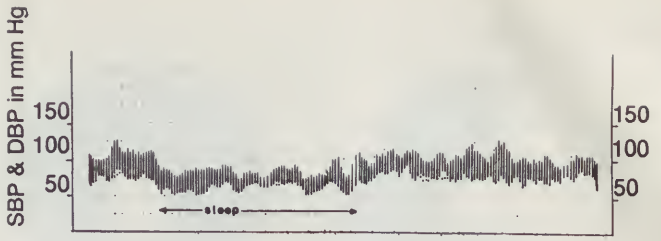


Figure. 1. Variation in SBP and DBP of one normotensive subject over 24-hour period.

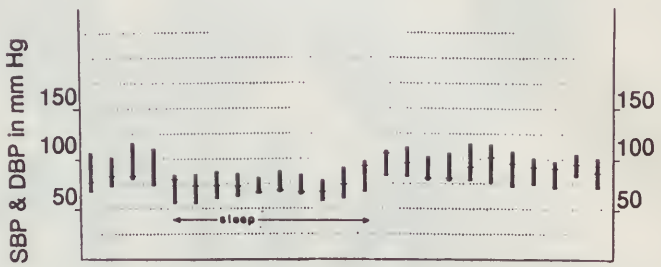


Figure 2. Hourly average of BP over 24 hours; 19-year-old female normotensive subject (same subject as Figure 1.).

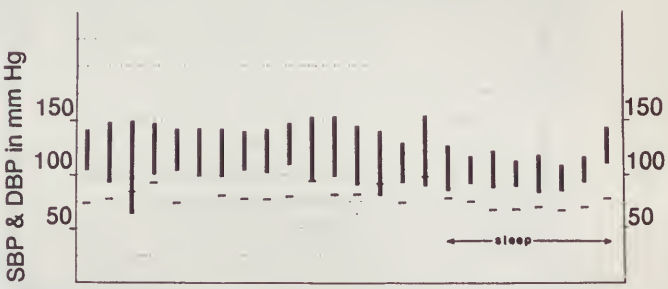


Figure 3. Hourly average BP over 24 hours; 19-year-old male hypertensive subject.

Table. Mean Ambulatory Blood Pressure and Heart Rate Data (Awake and Asleep) by Case/Control Status

	Case (n = 123)	Control (n = 129)	P
Awake SBP	115.2	111.6	.02
Awake DBP	68.6	66.3	.03
Sleep SBP	102.2	100.7	.32
Sleep DBP	61.1	59.6	.16
Awake HR	83.9	82.7	.32
Sleep HR	69.1	67.1	.08
%E SBP – A	8.7	4.3	.003
%E DBP – A	6.6	4.5	.07

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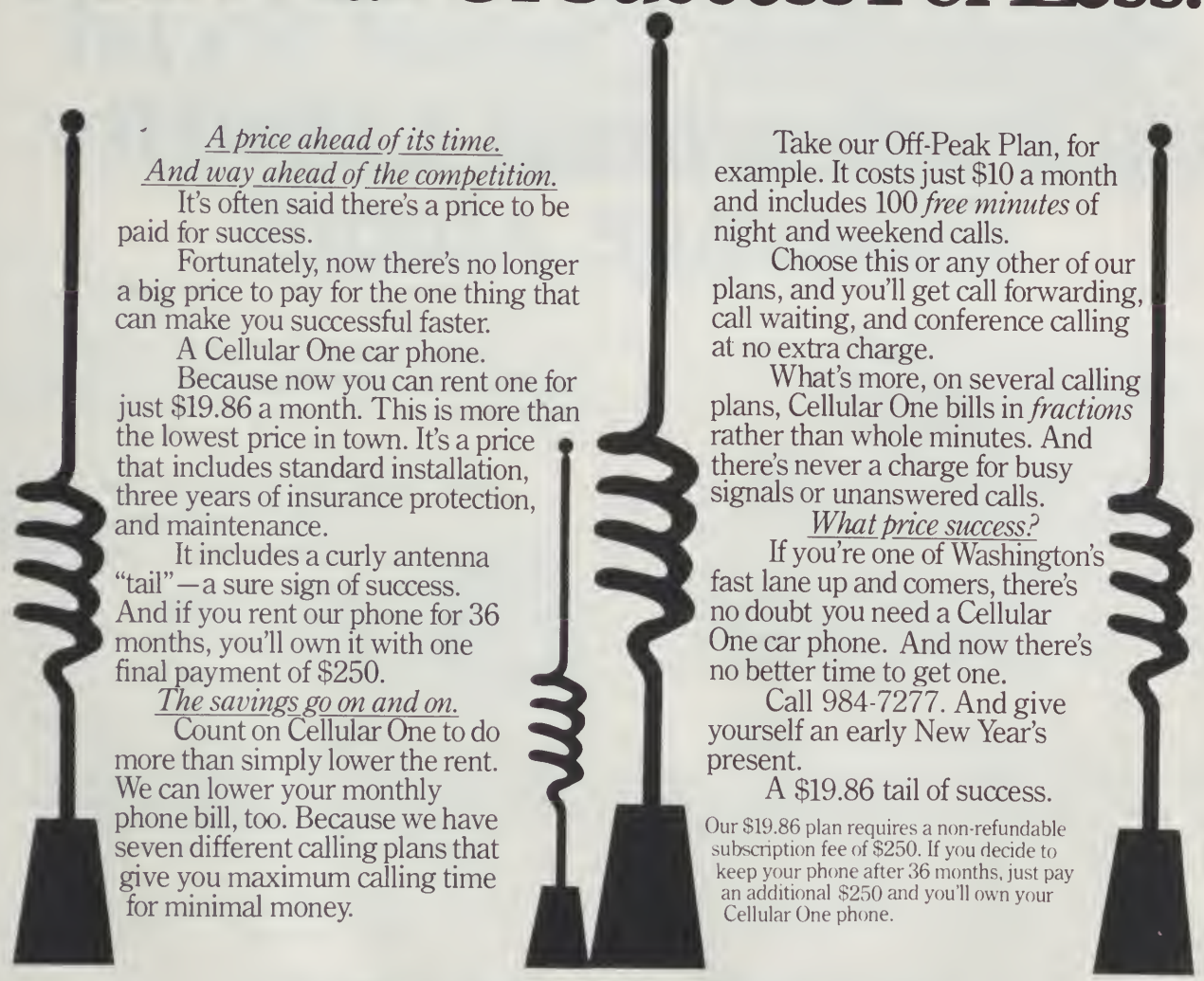
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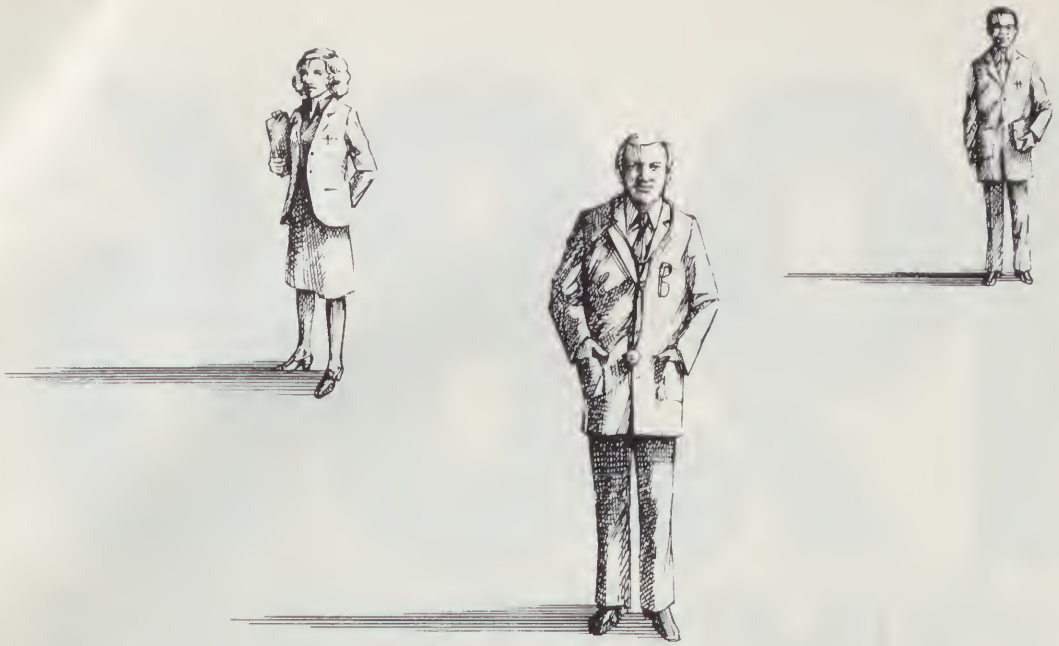
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Executive Director's Newsletter

January 1986

PHYSICIANS HONORED

Physicians who take Medicare assignment in all cases will be honored by the Maryland Senior Action Council at a wine and cheese reception on WEDNESDAY, JANUARY 29, 1986. House Environmental Matters Committee Chairman, Delegate Larry Young, will be the guest speaker at the event that will take place from 5 to 7 p.m. at Overlea Caterers, 6809 Belair Road in Baltimore. If you wish to attend, please contact the Maryland Senior Action Council at 301-235-5588.

FDA PILOT PROJECT

The Food and Drug Administration has awarded a contract to the Maryland State Department of Health and Mental Hygiene to conduct a pilot study of adverse drug reaction surveillance and reporting by practicing physicians. This project, which will attempt to determine the factors that inhibit physician reporting and to implement methods to promote reporting, begins in January 1986. More information on the project can be found in the Office of Disease Control and Epidemiology Newsletter in this issue.

PERTUSSIS REGULATIONS PUBLISHED

Proposed regulations concerning pertussis vaccines have been published for comment by the Department of Health. The regulations implement 1984 legislation establishing certain documentation and disclosures when administering the vaccine. A hearing was held on January 8, 1986. Copies of the regulations may be obtained from the Faculty office.

INSURANCE CONSUMER ADVISORY

Maryland Insurance Commissioner, Edward J. Muhl, has issued a consumer advisory regarding a company based in Kingstown, Saint Vincent, West Indies known as PRIME or Professional Risk Insurers Management Exclusive Company Limited. PRIME is an unlicensed insurer offering medical malpractice insurance in the State of Maryland at a fraction of the customary rates for comparable coverage.

PRIME is not certified by any state insurance commissioner in the United States, therefore, no guarantees can be made about the company's liquidity, product quality, safety, or ability to satisfy claims. Currently, PRIME does not have any local agents, claims offices, or legal counsel in the State of Maryland. Physicians entering into contracts with PRIME do so at their own risk.

RESOLUTIONS DEADLINE

The deadline date for receipt of resolutions for consideration at the 1986 Annual Session of the House of Delegates is FRIDAY, FEBRUARY 21, 1986. All resolutions must be received in the Faculty office by that date.

ILLINOIS TORT REFORM

The impressive package of tort reforms passed by the Illinois State Legislature in June has failed its first hurdle. Judge Joseph Wosik ruled the following reforms unconstitutional:

pre-trial screening panels
structured verdicts
sliding scale on contingency fees
collateral source rule
abolition of punitive damages

Judge Wosik said "no empirical data supports the claim that a medical malpractice insurance crisis exists."

The Illinois Attorney-General's office indicated it will appeal immediately, and the Illinois State Medical Society will seek to join as an amicus. The appeal is expected to be expedited by the state supreme court.

1986 ANNUAL MEETING

The Faculty's 1986 Annual Meeting will be held Wednesday-Friday, April 16-18 at the Baltimore Convention Center. A block of rooms has been reserved at the Baltimore Plaza Hotel, Pratt and Eutaw Streets, 301-962-0202; single accommodation $74, double $84. Please mention you are attending the Faculty's Annual Meeting when making your reservation.

1986 DUES BILLS

The 1986 dues bills have been mailed to all members. Physicians are reminded that payment of dues by January 31, 1986 is necessary to qualify for a legal defense panel, as outlined in the Faculty Bylaws. All dues and assessments are tax-deductible items for physicians.

JOHN B. SLAUGHTER

John B. Slaughter, PhD, Chancellor of the University of Maryland, was appointed to the Board of Directors of Medical Mutual Liability Insurance Society of Maryland.

In making the announcement, Raymond M. Yow, MD, Chairman of the Board of Medical Mutual, praised Dr. Slaughter's outstanding record of professional accomplishments and community service. Prior to joining the University of Maryland in 1982, he served as Director of the National Science Foundation. Dr. Slaughter received his PhD in Engineering Science from the University of California, Los Angeles, in 1971.

Acting Executive Director

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One Minute with Diabetes

About ten years ago I was told I had a touch of diabetes. It has never bothered me. Last month, at the annual "Health Screening Program" of my company, I was advised to seek treatment for diabetes. I am 53 years old, weigh 240 pounds, and am 66 inches tall. I feel fine and eat and drink anything I want.

At my wife's urging, I went to her physician who advised that I be admitted to the hospital for about a week to control my diabetes. He said it would all be paid by the company's health insurance plan. Since I feel fine and do not want to go to a hospital, I rejected that idea and went to another physician who said if the diabetes did not bother me, forget about it.

That appealed to me, but my wife insisted that I get still another medical opinion. This time, I sought a "diabetes specialist." He recommended that I definitely not ignore the diabetes: even though I feel fine and have been fortunate, ultimately complications of the disease would develop. He believed that most health insurance programs would not cover routine hospital admissions for education and control in the absence of complications. He estimated it would cost $1,500 to $2,000 for such a hospital stay. He recommended close office supervision of the blood glucose control and an outpatient diabetes education program.

Of the three physicians' recommendations, the "do nothing" was the approach of many physicians of the 1930s and 1940s, and still exists among a few physicians despite most modern medical literature condemning that approach.

The plan for hospital admission for regulation and education was popular in the 1960s and 1970s. It is laudable for those who can afford it, but regulation in a hospital environment requires regulation when one returns to living in the outside world. Under health cost control programs, it is almost totally denied by insurers now.

The recommendation of the third physician that blood glucose be closely supervised through an office program and that diabetes education be instituted on an outpatient basis is the easiest, most economical, and most practical way to manage this man's problem. Nutritionists, diabetes health educators, and counselors are available in most areas to carry out such programs. It is the physician's responsibility to arrange the program and make the necessary appointments for the patient. An acceptable program would include at least four hours of meal plan instruction, diabetes education, instruction in foot care, tests for monitoring control, general health instruction, and so on. It is also the physician's responsibility to review the results of the completed program and if found inadequate, the program should be repeated until understood.

It is unfortunate there are not sufficient good programs available for the number of patients needing such care. However, the Maryland affiliate of the American Diabetes Association and some of the larger hospitals have such programs, and more are being developed all the time.

DeWITT E. DeLAWTER MD

PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of the State of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to the Physician Placement Service, 1211 Cathedral St., Baltimore, MD 21201; telephone 1-301-539-0872.

Physicians wishing to locate in Maryland are invited to submit a resumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities which might be available in Maryland.

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Assessment of Memory Complaints in the Elderly

PETER V. RABINS MD

Research clearly demonstrates that minor changes in memory accompany aging. However, the vast majority of older people do not suffer significant cognitive impairment: at age 90, 70 percent of individuals have normal memory and thinking. When a patient expresses concern about memory, the first question is whether it is significant. Occasional word-finding difficulty or forgetting a name is very likely within normal expectations. However, forgetting significant events, losing one's way in a familiar setting, loss of ability to do activities such as fill out a checkbook, or a family's reports that a patient's memory difficulties are frequent and significant should lead to assessment.

Evaluation of the person with decline in memory should be carried out by an individual knowledgeable about the differential diagnosis. Specific training in neurology or psychiatry is not required.

Decline in cognition is broadly divided into two categories. In dementia, cognitive decline affects several different thinking functions, but the person normally is alert. In delirium, cognition is deteriorated but the person's level of consciousness is not normal; that is, the person is drowsy or significantly inattentive. This distinction is important clinically because the differential diagnosis is different; therefore, treatment and course of the condition often are different.

Causes of dementia can be divided into several broad categories. Reversible, treatable dementias can be suspected from the history and physical examination and indicate an extensive laboratory assessment should be pursued. Specific neurologic disorders, for which dementia is one symptom, usually can be identified by the clinical picture and confirmed on laboratory assessment. Multi-infarct dementia falls into the second category and affects about 20 percent of persons with dementia. It is characterized by periods of sudden worsening followed by periods of stability or slight improvement. It is associated with hypertension or diabetes. The CT scan reveals multiple small strokes.

Patients who fit none of these conditions are considered to suffer Alzheimer's disease. Alzheimer's disease should be diagnosed only when no other conditions are found, when the patient's impairment has been slowly progressive, and when the patient suffers not only memory disorder but also disturbances in other areas of cognitive function.

Delirium often begins suddenly or subacutely. History, physical examination, and laboratory assessment uncover an etiology in half the cases. Medications are the most common cause.

Treatment of delirium consists of specific treatment of the underlying disorder. Frequent orientation and reassurance, keeping a light on, and removal of overstimulation often can aid the patient during recovery. Occasionally, neuroleptic drugs are necessary for the severely agitated patient.

In dementia, treatment consists of maximizing care of associated medical problems, emotionally supporting the patient and family, identifying specific problems, and either suggesting interventions or referring the family and patient to experts.

Because delirium and dementia are common disorders in the elderly, and because the over-75 age group is the fastest growing population, the number of individuals suffering these two disorders will probably increase by half in the next 25 years. Physicians can make a positive difference in the care of these patients. Gaining expertise about these disorders can be rewarding for both physician and patient.

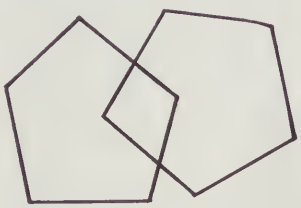
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The Mini Mental State (opposite), a screening test developed by Marshal Folstein, Susan Folstein, and Paul McHugh, is a simple, graded, cognitive exam. A score below 24 is abnormal. Mildly impaired patients can score in the normal range. The test is useful because it gives the clinician a means of objectively examining and following an individual's condition over time. This helps determine whether he or she has improved or deteriorated. It also helps identify specific problems such as language impairment, perceptual impairment, or memory impairment.

Committee on Emotional Health, Gary W. Nyman, Chairman; Lino Covi MD, Editor.

Mini Mental State
Inpatient Consultation Form

Maximum Score	Score	
		Orietation
5	( )	What is the (year) (season) (date) (day) (month)?
5	( )	Where are we: (state) (county) (town) (hospital) (floor)?
		Registration
3	( )	Name 3 objects: 1 second to say each. Then ask the patient all 3 after you have said them. Give 1 point for each correct answer. Then repeat them until he/she learns all 3. Count trials and record.
		Trials
		Attention and Calculation
5	( )	Serial 7s. 1 point for each correct. Stop after 5 answers. Alternatively spell "world" backwards.
		Recall
3	( )	Ask for 3 objects repeated above. Give 1 point for each correct.
		Language
9	( )	Name a pencil and watch (2 points) Repeat: "No ifs, ands, or buts." (1 point) Follow a 3-stage command: "Take a paper in your right hand, fold it in half, and put it on the floor." (3 points) Read and obey the following: "Close your eyes." (1 point) Write a sentence. (1 point) Copy design. (1 point)



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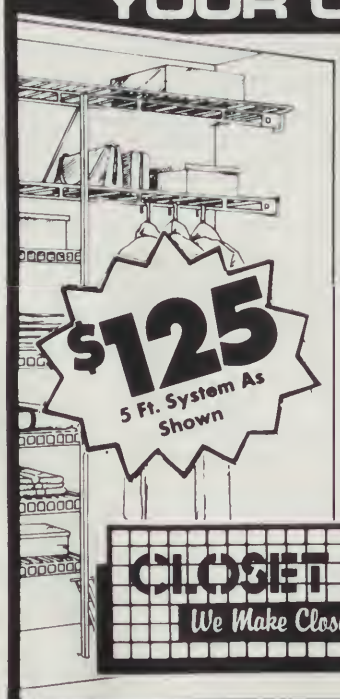
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The Library Page

International Congress of Medical Librarians Tokyo—1985

During the first week of October, 567 medical librarians representing 66 countries gathered in Tokyo for the Fifth International Congress of Medical Librarians. The congress' theme was "Medical Libraries—One World: Resources, Cooperation, Services."

Since I attended the previous congress (Belgrad, Yugoslavia, September 1980), an important part of this congress was renewing many acquaintances and friendships made in Belgrad. In addition, the Med-Chi Library receives a fair share of international visitors. While at the congress, I encountered librarians and physicians from Mexico, Australia, Great Britain, Finland, China, and Japan who have visited the Faculty and toured our library in the past few years.

The days of the congress were filled with thematic addresses and concurrent sessions. The first volume of the congress proceedings already has been published and contains 826 pages; a second volume is to follow. I attended sessions on national policies affecting the distribution of health information, developing medical information management systems, training physicians and health workers to interact with computerized medical information systems, future roles for medical libraries and librarians, and access to medical information sources for physicians and health workers in remote areas. I also visited medical schools, hospitals, and medical libraries around Tokyo and several other cities in Japan.

The theme "Medical Libraries—One World" is not as farfetched as it might seem. Resources and services in the medical school libraries I visited in Japan were comparable with U.S. medical libraries. Their automated reference services include MEDLINE. Japanese medical libraries also have their own automated information services that access many publications and resources from East Asia not included in MEDLINE. They have integrated library systems with on-line catalogs, automated circulation, interlibrary loan, book and journal acquisitions, and so on.

Japanese medical libraries contain a large representation of English-language medical periodicals and recent monographs. They carry more French and German medical periodicals and texts than are found in most U.S. medical school libraries. Of course, most publications found in their libraries are in the Japanese language. I was very impressed with the quality of illustrations in their current text books when compared with U.S. publications.

Japanese libraries also resemble U.S. libraries in their problems, especially that of gaining an adequate share of their parent institutions' budgets. Staff work areas often appeared cramped and crowded. A U.S. physician might feel at home in a Japanese medical library; U.S. medical librarians hardly would notice they were in a different building, at least not until they turned on the computer and got a log-on message in Japanese characters.

Japan's libraries are more comparable with the United States' than are most of the sixty-four countries represented at the congress. Medical libraries from developing countries were well represented at the meeting thanks to a special scholarship program. For example, New Guinea, a country the size of California with about the population of Maryland, has only one medical library and was represented by the country's one medical librarian. Even for these countries the congress theme fit well.

In hearing papers presented on medical library services in developing countries and in talking with librarians from these countries, I was struck over and over by the similarity of their stories to ours about delivery of medical information in hospitals in rural parts of the United States, including Maryland. In many, many cases the problems were exactly the same: lack of on-site resources containing needed information and lack of an information delivery system that could provide needed information to physicians and health workers in time to influence decisions.

While the problems are similar, the barriers to be overcome by developing countries in solving these problems are much greater. For many countries, language is an obvious obstacle. Most individuals delivering health care to most of the world's population do not read English, German, or French. The majority of the world's medical literature, especially results of significant medical research, appears in one of these languages. If a physician or health worker does read English, German, or French, infrequent air service and irregular mail delivery often make lending of materials or delivery of photocopies slow and difficult. Very often publishers of medical books and periodicals require that libraries in developing countries pay for purchases and subscriptions in western currency, an impossibility in many cases. Many third-world librarians expressed their frustrations at being unable to build runs of major medical periodicals.

A more fundamental issue is the appropriateness of the medical literature for the information needs of health workers who deal with most of the world's population. The latest *Cumulated Index Medicus* consists of 14 volumes, contains 15,057 pages, occupies almost three feet of shelf space, and weighs about sixty-five pounds. One speaker reported the contents of *Index Medicus* showed less than 10 percent of the references indexed are related to illnesses that represent the ten leading causes of death worldwide. Although *Index Medicus* is international in scope and coverage, its value

Medical and Chirurgical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian

as an information guide for health workers in developing countries is limited by its overwhelming emphasis on medical journals from developed countries. In addition, the information in those journals is oriented primarily toward the medical needs of the developed countries.

MEDLINE (which is essentially *Index Medicus* on line from a computer) and on-line access to the articles contained in the indexed journals will not be sufficiently helpful to health workers in developing countries. Although a huge store of information would be available, most of the information would not be relevant to their needs and circumstances. The rapid spread of the AIDS epidemic (which appears to have originated in a developing country) should remind developed nations they have more than a little stake in giving attention to the health problems of the rest of the world.

The World Health Organization has a stated goal, "Health for all by the year 2000." As a sponsor of the international congress of medical librarians, WHO acknowledged that this goal could not be achieved unless the information needs of all medical practitioners and users of health services were being met in timely, efficient, relevant, and accurate ways. The wide and seemingly insurmountable differences between political systems, economic systems, and cultures may appear to prevent these goals from being achieved. However, at this congress and the previous one I was able to observe librarians from East and West Germany; Israel, Egypt, and Syria; Iran and Iraq; and India and Pakistan all discussing and sharing their problems, concerns, and successes. I remain an optimist convinced that the need of the world's people for adequate health care and their right to have it will ultimately take priority over individually different political systems, economies, and cultures.

JOSEPH E. JENSEN
Librarian

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Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during October 1985.

	No. of citations
1. Adverse effects of somatotropin	29
2. Asian immigrants and psychological adaptation or social adjustment	16
3. Computers and medical history taking	36
4. Cytotoxan and lupus erythematosus	21
5. Depression as a complication of cerebrovascular disorders	25
6. Popliteal artery and nerve compression syndromes	16
7. Replantation or microsurgery of the penis	17
8. Restenosis after carotid endarterectomy	23
9. Ultrasonic diagnosis of pyloric stenosis	17
10. Uvulopalatopharyngoplasty	15

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

SUSAN E. HARMAN
Reference and Circulation Librarian

Future Med-Chi Meetings

1986 Annual
April 16–18
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Baltimore Convention Center

1986 Semiannual
September 10–14
Montreal

September 14–17
Post-Convention Trip
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1987 Semiannual
Mid-September
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1988 Semiannual
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Letter to the Editor

Avoiding the Hazards of Malpractice Suits

The continued rise of premiums for malpractice insurance presents an almost insolvable problem to many practicing physicians. They have become bitter toward the public whom they have been serving and toward the legal profession. They also are resentful of attacks on their professional practices with what they consider, many times, frivolous suits.

All physicians will admit malpractice does occur but not to the extent suggested by the expectations of patients and families seeking financial compensation for the alleged wrong. The heat of malpractice recently has been intensified occasionally by the lawyer seeking claims and willing to pursue any allegation. Too frequently, the physician is wrongfully accused of carelessness and incompetence.

To avoid or at least alleviate malpractice difficulty, the physician should be certain that the patient and the relatives understand the disease with which the patient is afflicted, what the therapeutic recommendations are, and what reasonably can be achieved. The physician must create and maintain a strong liaison with the patient and relatives. He/she should be frank in explaining a disease with a poor prognosis, but the explanation of potential hazards and envisioned prognosis should be made with empathy and sympathy. If the patient were an individual to the doctor instead of a "case," many malpractice suits never would be engendered.

Most physicians conduct ethical practices. The few incompetent individuals in medicine who subsequently may be responsible for monetarily substantial verdicts should have preventive peer counseling and perhaps curtailment or removal of privileges. Only a few physicians are responsible for the increased malpractice premiums paid by all doctors; the cost of settlements by insurance companies must be realized from collections from the insured.

The Quality Assurance Committee must play a strong role in the hospital conduct of physicians. The committee should focus on problems of individual care to alleviate the potential risk of suit. Careful and concerned assessment of clinical problems must be followed by an appropriate corrective response, if necessary.

The Joint Commission on Accreditation of Hospitals accents that the Medical Staff has the overall responsibility for the ethical conduct and professional practice of its members and should account for these practices to the Board of Trustees. By means of the credentialing procedure, the Board should be assured that each member is qualified and remains so. Privileges, specifically delineated by current competence, should be in continuous review with modifications dictated by therapeutic results.

If empathic peer audit is undertaken, the scenario for many malpractice suits never would be written. Such fundamental control will prevent or alleviate problems.

From the legal aspect, the instigation of many claims might be thwarted by requiring that the suing attorney investigate the allegation of malpractice prior to bringing suit.* Careful analysis of a claim may convince the ethical attorney that justification for suit does not exist.

According to Zaremski,* another remedy to be used by the medical profession is to sue the attorney for the plaintiff for barratry (persistent incitement of litigation), perhaps on a fraudulent basis. Although the United States Supreme Court has noted that the first and fourteenth amendments require a measure of protection for advocating lawful means of vindicating legal rights, the concept of barratry is now being tested before a state appellate tribunal.

Apart from this suggestion, some states provide an alternative remedy for physicians sued on a frivolous basis. The physician may move for attorney fees to be paid and may institute disciplinary proceedings against the opposing counsel.

To recapitulate, the hazard of malpractice suits may be blunted or even avoided by a continuous process that includes:

1. Careful review of diagnosis and therapy by peers on the specific service.
2. Submission in writing of potential malpractice situations to the Quality Assurance Committee.
3. Evaluation of untoward clinical results by a Review Committee appointed by the Medical Executive Committee.
4. Analysis of the recommendations of the Review Committee by the Medical Executive Committee.
5. Return of the judgment of the Medical Executive Committee to the Chief of Service for appropriate action.
6. Return of the decision of the Chief of Service to the Medical Executive Committee for notification and then inclusion of the document in the personnel file of the physician concerned.

Many of the causes of malpractice may be removed by the understanding and counseling provided by effective peer review. In addition, the individual physician should be aware of the extent of his/her capability and should seek help and consultation for the troublesome patient. A good liaison among physician and patient and family is vital, and this desired situation can only be achieved by dialogue, time-consuming though it may be. Finally, the admonition in the first chapter of Proverbs is worth recalling. "To receive the instruction of wisdom, justice, and judgment, and equity, a wise man will hear and will increase learning; and a man of understanding shall attain unto wise counsels."

***JOSEPH M. MILLER* MD**
Director of Medical Education
Provident Hospital, Inc.

* Zaremski, M. J. "Doctors and Lawyers as Adversaries: Stemming the Tide of Malpractice Litigation." *For the Defense* 26 (1984): 22.

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JANUARY 1986

REVISED STD TREATMENT GUIDELINES

GONOCOCCAL INFECTIONS

Treatment of Adults

For uncomplicated urethral, endocervical or rectal infection:

Recommended Regimens

An important concern in treatment for gonorrhea is coexisting chlamydial infection, documented in up to 45 percent of gonorrhea cases when adequate chlamydial cultures are performed. Concern also exists about the problem of patient compliance with multiple-day tetracycline/doxycycline regimens for gonococcal infections and for the potential selection of tetracycline resistant isolates when incomplete doses are taken. To address these concerns, a single-dose regiment for gonorrhea should be administered just prior to a tetracycline or doxycycline regimen.

Amoxicillin 3.0 g or **ampicillin** 3.5 g by mouth OR **aqueous procaine penicillin G (APPG)** 4.8 million units IM OR **ceftriaxone** 250 mg IM.
Amoxicillin, ampicillin and penicillin (but not ceftriaxone) are accompanied by **probenecid** 1 gram by mouth.

Comment: APPG may be less desirable because of associated pain and toxicity.

PLUS

Tetracycline HCl 500 mg by mouth 4 times daily for 7 days OR **doxycycline** 100 mg by mouth twice daily for 7 days.

OR

For patients in whom tetracyclines are contraindicated or not tolerated, the single-dose regimen may be followed by **erythromycin base or stearate** 500 mg by mouth 4 times daily for 7 days OR **erythromycin ethylsuccinate** 800 mg by mouth 4 times daily for 7 days.

Special Considerations

For women with rectal infection the above regimens are effective. Homosexual men with rectal gonococcal infection should be treated with **ceftriaxone** 250 mg IM OR **aqueous**

procaine penicillin G 4.8 million units IM PLUS **probenecid** 1.0 g by mouth. For those allergic to penicillin, use **spectinomycin** 2.0 g IM. These regimens provide adequate treatment for urethral and rectal gonococcal infection, but spectinomycin is not recommended for treatment for pharyngeal gonococcal infection. Homosexual men are less likely than hetrosexual men to have coexistent chlamydial infections; therefore routine additional tetracycline or doxycycline treatment is not recommended.

Patients who are allergic to penicillins, cephalosporins, or probenecid should be treated with tetracycline 500 mg by mouth 4 times daily for 7 days or doxycycline 100 mg by mouth twice daily for 7 days. Those patients who cannot tolerate tetracyclines may be treated with spectinomycin 2.0 g IM followed by erythromycin (except for homosexual men) as above.

All patients treated for gonorrhea should have a serologic test for syphilis. Patients with incubating syphilis (seronegative, without clinical signs of syphilis) are likely to be cured by all the above regimens except spectinomycin used alone. Patients with gonorrhea who have documented syphilis or are established sex partners of syphilis patients should be given treatment appropriate to the stage of syphilis in addition to treatment for gonorrhea.

Management of Sex Partners

Women and heterosexual men exposed to gonorrhea (e.g., within the past 30 days) should be examined, cultured, and treated prophylactically with one of the regimens which covers both gonococcal and chlamydial infections.

Homosexual men exposed to gonorrhea should be examined, cultured, and treated for gonorrhea.

Follow-Up

Follow-up cultures should be obtained from the infected site(s) 3-7 days (4-7 days for patients treated with doxycycline) after completion of treatment. Cultures should be obtained from the rectum of all women who have been treated for gonorrhea, regardless of whether rectal gonorrhea was documented prior to therapy.

These recommendations were taken from 1985 STD Treatment Guidelines published in Morbidity and Mortality Weekly Supplement, Vol. 34, No. 45, October 18, 1985. Physicians may obtain a free copy of these guidelines after February 1, 1986 by writing Gary Wunderlich, Venereal Disease Control Program, Department of Health and Mental Hygiene, 201 West Preston Street, Baltimore, Maryland 21201. Telephone: (301) 225-6688.

FOOD AND DRUG ADMINISTRATION AWARDS CONTRACT TO STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE FOR PARTICIPATION IN PILOT TESTING OF ADVERSE DRUG REACTION (ADR) SURVEILLANCE

The Food and Drug Administration (FDA) has awarded a contract to the Office of Disease Control in the State Department of Health and Mental Hygiene to determine physician attitudes, behavior, and knowledge of the FDA's spontaneous ADR reporting system, and to promote future reporting by providing an innovative reporting method during the contract period. The State Health Department is collaborating with the Johns Hopkins Pharmacoepidemiology Unit and the Center for Health Education, Inc. to perform the project. One of the reasons the FDA chose the State of Maryland was the participation and commitment demonstrated by state physicians in other health promotion efforts.

Many novel strategies have been proposed for the detection of adverse drug reactions to marketed drugs. These efforts have been stimulated by newer methodologies and increased computer capacity. No new strategy, however, appears to be capable of supplanting the spontaneous reporting system, particularly the voluntary physician reporting component, for its unique alerting potential. This was demonstrated in an evaluation of the types and sources of reports received by the FDA in 1970. While physician and other professional reports represented only one percent of all reports received by the FDA (251 of 17,946), these professional reports resulted in 24 percent of all the subsequent PDR labelling changes generated by the system in that year. Proportionately, physician reports represent more serious and unexpected adverse drug reactions.

The FDA considers spontaneous physician reporting of ADRs to be a critically important facet of drug safety surveillance in this country and recognizes the system for such reporting, as it currently exists, may not be meeting the needs of busy, practicing physicians. They hope, by evaluating in these pilot studies the reasons physicians under-report, to modify the national system to make it more efficient and attractive for physicians.

The pilot project in Maryland will begin in January, 1986. Physicians whose state licensing addresses are in Baltimore City, Baltimore County, Prince Georges County, and Montgomery County may be randomly selected to receive a short questionnaire about ADR reporting. Replies will be held in strict confidence and coded to preserve anonymity. One questionnaire will be mailed in late January, 1986, and a second questionnaire will be mailed in late November, 1986. Maryland physicians are encouraged to take the few minutes the questionnaires require. No other research in which a busy practicing physician may participate could be more important in directly affecting patient safety with prescription drug use.

WHAT MAKES WIC A WORTHWHILE PROGRAM?

WIC (the Special Supplemental Food Program for Women, Infants, and Children) is different from other food assistance programs in careful selection of recipients and efforts to maximize program benefits. Does it pay off?

WIC is carefully targeted to reach the people most in need of the benefits it provides. It is aimed at population groups experiencing rapid growth and especially vulnerable to the effects of poor nutrition. All WIC clients also have low incomes and limited food budgets. Most of Maryland's WIC participants report nutritionally inadequate diets at the time they enter the program. They are likely to have anemia, history of poor pregnancy outcomes, medical conditions that affect or are affected by diet, or other significant nutrition risk factors.

The WIC program helps people get into, and stay in, a health care system. WIC in Maryland is not a "food band-aid"; it is intended to improve each participant's total health. There is evidence on a national basis that WIC improves pregnant women's use of medical care, and improves the likelihood that children have a regular provider of medical care and are being immunized.

Only specific foods meeting nutrition criteria are provided to WIC clients. Food choices are not left to chance. Provision of appropriate foods in appropriate amounts sets an example for WIC families, and promotes the establishment of good food habits. WIC participation has been found to improve the overall nutritional intakes of pregnant women and children.

WIC families are given help in how to use the foods they receive, and how to build them into balanced meals. Mothers in the program learn what and how much to feed their young children, and how to manage any special dietary needs. A soon-to-be-released national study of WIC is expected to show that WIC is bringing more food, or possibly food of higher quality, into participant households.

Recent evaluations of the program are in general agreement that WIC participation results in a lower incidence of low birth weights, and an increase in average birth weights. It may also help limit the development of iron depletion or iron-deficiency anemia in young children. WIC participants at highest risk seem to show the most improvement; for example, among pregnant women those with low prepregnancy weight or poor weight gain during pregnancy benefit the most. It is hard to measure subtle changes in vitality that affect physiologic, psychologic or social performance throughout life, but experience in other countries suggests that food supplement programs for poorly nourished populations do bring about positive improvements in these areas.

The impact of WIC across the country is real, and substantial. It is certainly fair to say that WIC in Maryland is a client-caring, cost-beneficial program that is an effective adjunct to good health care.

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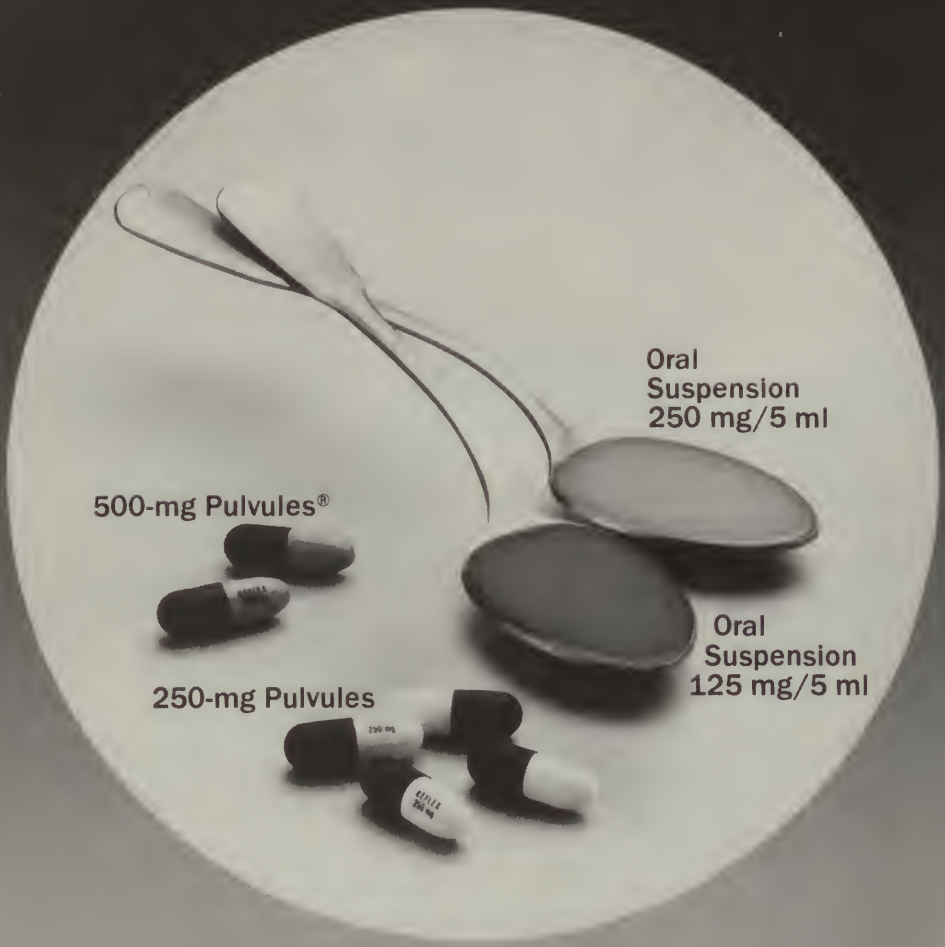
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Editorial

Another Look at Professional Liability Insurance

The article by Charles M. Henderson MD beginning on the next page is a thought-provoking piece certain to generate comments from *MMJ* readers. Dr. Henderson has been a thoughtful observer, participant, and spokesman for Maryland medicine on the professional liability insurance scene for the past decade. He details the perception of many physicians on this matter so critical to their practice existence. If there were not another view on the subject, all the legislative changes proposed by the medical community would have been enacted by the legislature. The "other side" has challenged such proposals as changing the collateral source rule to benefit defendants. Why should the injured plaintiff (patient) who has paid for insurance coverage be limited to his/her own coverage, in a no-fault sense, to the unjust enrichment of the negligent defendant? This and similar questions have stalled the enactment of several of the proposals mentioned in Dr. Henderson's article.

This editor is not about to detail the pros and cons of each side. I will leave it to our interested readers to comment. Thoughtful responses will be considered by the Editorial Board for publication in future issues.

Dr. Joseph M. Miller's contribution on page 29 includes the suggestion of more physician countersuits. Few have been successful anywhere in the United States, and none have been successful in Maryland. Maryland physicians who practice in the suburban D.C. counties have been eligible to join the D.C. Medical Society Countersuit Fund that was established almost ten years ago. I have yet to see a successful case pursued by that medical society sponsored fund in *all* the years of its existence. Either the law of the land does not welcome countersuits, *or* the defense fund has found there are not many frivolous cases being pursued by claimants.

Dr. Miller believes there are many frivolous cases. The defense fund has not published its experience in reviewing cases. Dr. Miller is invited to document his sources, and a report from the defense fund on its experience also would be of interest to *MMJ* readers.

The reason for the lack of success of countersuits in the Maryland-D.C. area also may be operative in precluding physicians from being reimbursed their attorney defense costs. Dr. Miller suggests that successful physician defendants seek reimbursement for attorney defense costs and also report the unsuccessful plaintiff's attorney to the attorney disciplinary commission.

When will we stop throwing good money after bad? The unsuccessful plaintiff's attorney already has paid a price in time and effort. He/she will think twice before pursuing another professional liability case. The disciplinary committees, I suspect, are overburdened with legitimate complaints against attorneys for unprofessional conduct.

Being on the losing side of a professional negligence action does not equate with unprofessional conduct on the part of the attorney any more than it does on the part of the losing physician defendant.

JIM ZIMMERLY

A Medical Malpractice Primer

CHARLES M. HENDERSON MD

Dr. Henderson is in private practice as a neurological surgeon working out of St. Agnes and Kernan Hospitals. He is an associate professor in neurological surgery at the University of Maryland School of Medicine.

Many years ago, in the land of Camelot, the once and future King was born. This new King was named litigation, and he was guaranteed protection by the Rules of the Land. As time passed, the King evolved into a Hydra with many heads. Each of the multiple heads was protected to the death by those serfs of the King on whom each depended. The heads have assumed a variety of contemporary names: product liability, corporate liability, personal liability, strict liability, and so on. A seemingly separate head was named professional liability, and initially was aimed primarily at the physicians of the land. Of late, other professionals have felt the hot breath from this head, including attorneys, ministers, and teachers. That is, however, another story.

While for some time many persons thought medical liability represented an area of genuine concern, it took the corporate leadership of the St. Paul Insurance Company to bring this to the attention of the citizens of Maryland. In 1975, St. Paul (based on what they viewed as an ominous outlook financially) adopted the policy that they would no longer insure physicians in Maryland for professional liability (medical malpractice). Since St. Paul had the vast bulk of this market, the situation became critical—for the physicians, for the hospitals, for the people, and for the Maryland General Assembly. This first "malpractice crisis" was not one of cost per se, but one of insurance availability. Thoughtful persons realized that no reputable company could or would function without officers' and directors' insurance, and if that were the case, perhaps doctors should be able to insure themselves too.

Concerning the issue of "availability versus affordability" of malpractice insurance, the following information recently was published. One of the present carriers in Maryland (Pennsylvania Casualty Company) announced that no further occurrence type policies would be offered or renewed and that all coverage would be denied to OB/GYN specialists with any prior claim (no matter what the ultimate litigation result). They further stated that no coverage would be provided to solo practicing physicians after 1 November 1985. Recent data from the American Medical Association indicates that in 1983, twenty malpractice claims were filed per hundred physicians in the United States, compared with five per hundred physicians in 1975. Jury Verdict Research reviewed 171 malpractice verdicts in 1984 and found the average award was $995,000 compared to less than one-third that amount in 1975.

A result of the 1975 "crisis" atmosphere was the establishment of a Medical Malpractice Task Force in the General Assembly; multiple hearings in both the Senate and House of Delegates; and ultimately the General Assembly passed stop-gap legislation that established our own Medical "Bed-Pan" Mutual (The Medical Mutual Liability Society of Maryland).

In association with this rush to judgment, the Medical and Chirurgical Faculty of the State of Maryland (acting on behalf of physicians) appeared regularly in support of legislative relief. At the same time, other organizations became belatedly concerned. One such organization (the Maryland Neurosurgical Society) balked at the old axiom "they should do something," finding the ubiquitious "they" to be all too ill-defined. As Pogo so sagely stated: "We have met the enemy and he is us." The Medical Practice Action Committee (MPAC) was formed by a group of neurosurgeons, as well as other concerned physicians. MPAC appealed to the physicians of Maryland for financial support, and approximately 20 percent did participate financially in this effort to supplement the effort of Med-Chi.

In multiple testimonies in Annapolis, MPAC pointed out what was happening in California, Michigan, and New York. At each event, we were advised that this is Maryland—not California—not New York—and that sort of thing doesn't happen here. Physicians were viewed as a special interest group with few friends in Annapolis. We were confronted by all manner of adversaries. The plaintiffs' bar was perhaps the most visible, but no less telling was the testimony of the defense bar, the insurance industry, hospitals, citizens' groups, and others.

Solutions Sought

Over the next two to three years, the General Assembly splinted the fracture further by creating the Health Claims Arbitration Office; by redefining the Statute of Limitations to three years from occurrence (or when the patient should reasonably have become aware of the occurrence of the alleged negligence) and to sixteen plus five years for minors. A bill also was passed to restrain the use of the *ad damnum* clause. Prior to this, it was not uncommon to see a headline stating that Doctor A was being sued for literally millions of dollars. With this bill, the dollar amount being sought could no longer be published but only that litigation against a particular physician had been instituted.

Simultaneously, other pieces of proposed legislation were drafted, and attempts at introduction into the legislative process were instituted. These included:

1. A bill to define expert testimony.

2. A bill to permit the introduction into evidence of collateral sources of payment to the patient.
3. A bill to permit periodic payments of damage awards.
4. A bill to "broaden the base" of professional liability insurance coverage.

Expert Testimony: In Maryland, a judge may allow any physician to testify as an expert in a malpractice case. This "expert" need not be that at all, but only be willing to swear that he or she is. We became bitterly familiar with new terms: the "foreign hired gun" (a self-styled expert from overseas who would state that the physician on trial was in error—usually "in gross error"). We heard about companies formed for the sole purpose of evaluating cases and supplying witnesses who would qualify as "experts" and testify accordingly. The General Assembly and both plaintiff and defense bar groups asserted that the presiding judge had the authority to accept or not accept the qualifications of any particular witness. I know of no instance where the presiding judge has taken it on himself to impugn such "experts." The result was an avalanche of physicians from overseas and adjacent states testifying in Maryland about alleged deviations from the standard of care.

The term "standard of care" deserves definition because ultimately almost all medical malpractice cases rise or fall on this point:

- The physician must possess the same degree of learning and skill that other physicians in similar situations possess;
- The physician must use reasonable care in applying his/her knowledge to the case;
- The physician must exert his/her best judgment in the treatment of the patient.

If the physician fails to meet these requirements, and if this failure is the *proximate* cause of injury to the patient, then the physician can be viewed as medically negligent. Further amplifications of this would include the question: Did the physician either do or not do something that was the proximate cause of the injury?

Some years after this initial "crisis," the Court of Appeals of Maryland ruled (in accordance with other jurisdictions) that the physician was no longer to be held responsible for his/her actions based on local standards (the so-called "locality rule"). The Court of Appeals reasoned that in this country (with the availability of multiple journals, the availability of multiple meetings, and other teaching mechanisms), the standard of care in Maryland should be held to be the same as a national standard—neither more nor less.

With the foreign "expert" witnesses, we found we were being held to an increasingly ill-defined international (not even national) standard of care, and not of reasonable care, but of what these physicians described as optimal care. We found there were very few perfect people, much less perfect physicians. We had to deal with "experts" who were, in fact, not even specialists in the area of concern at the trial, for example, internists versus orthopedic surgeons or physical therapists versus neurosurgeons. Again, that these physicians were willing to certify they were expert and knowledgeable about the area of concern was apparently enough for the presiding judges.

Collateral Sources: Much hospitalization expense is paid for by third party insurance coverage (Blue Cross and Blue Shield, commercial insurance, Workmen's Compensation, and others), and it never seemed either fair or justifiable to defendants to have these fees duplicated in a particular patient's ultimate award. The same applies in some circumstances to economic loss.

Periodic Payments: In an increasing number of jurisdictions, the courts are allowing the insurance companies involved to establish annuities to pay judgments over the prorated lifetime of the award. This is a benefit in two ways: The insurance company is not forced to come up with X thousands (or of late X millions) of dollars at one time but can invest adequate funds to assure that the same dollars will be paid to the patient and his or her family over Y years. Secondly, the funds are not available to be used injudiciously and in excess of actual need.

Broaden the Base: The population of Maryland is approximately 4.5 million people, and the physician population in Maryland is approximately eight to nine thousand. It is patently unreasonable to assume that this small number of physicians can, in perpetuity, support this increasingly burgeoning health care burden. When MPAC proposed legislation to this end to the General Assembly a few years ago, it was vigorously opposed by all comers including hospitals, nurses and Allied Health Care professionals. As always, "I'm sorry you have a problem, Doctor, but it is not our problem." Well, time has proved that it is, in fact, a problem we all face daily and live with daily.

A local attorney has gone on record recently as stating that the increased professional liability insurance costs are actually no big deal. A $50,000 malpractice premium is only $25,000 after taxes to the obscenely rich doctor. I do not dispute that there will be rich doctors, just as there are rich lawyers, rich accountants, and rich service station operators. I do not know these "rich doctors," although I would be the first to agree most of us are financially better off than if we were trying to make a living doing something else.

Actually, I know of no other way to make a living.

Nevertheless, the professional liability premium for our own three-man group of physicians (we are neurosurgeons) is projected to be over $148,000 next year. The following year it is projected well beyond $200,000. When one adds on office expenses (rent, utilities, supplies, office personnel salaries, and so forth), we face a projected budget of well over twice that amount. That is before taxes and before any of us makes a nickel.

The current plight of the obstetricians has caught the public fancy. Perhaps it took a literal "motherhood and sin" issue to focus public attention on the problem. I have told many young physicians contemplating a career in obstetrics that they should think again. A combination of a Statute of Limitations of sixteen plus five years, the general perception that any baby with a problem is the fault of the obstetrician until proved otherwise, a contracting patient market, the increasingly progressive reduction in fees paid for their services—all would make this a seemingly undesirable specialty on which to embark. In the 1950s a malpractice coverage of $100,000/$300,000 was deemed perfectly adequate. The current awards against obstetricians can reach millions of dollars, and there was no possibility that this social trend could have been anticipated twenty plus years ago.

Nationwide Increases

While rates are increasing in Maryland, we are not alone in this regard. On 1 October 1984, Indiana rates were increased by an average of 60 percent. A North Carolina company recently announced a 50 percent increase; and in Utah, a professional liability carrier announced a 42 percent increase. Rates in Northern California were increased by 27 percent effective 1 January 1985; and by 24 percent in New Jersey effective December 1984. The New York State increase was initially at 52 percent, but in an effort to alleviate the problem, this was "ruled back" to about 30 to 35 percent. A great relief!

The statement has been made in the General Assembly (as well as other places) that, nearly everyone likes his/her own doctor, but not many people like doctors in general. I don't disagree, and the corollary is: who likes all lawyers, all politicians, all teachers, all ministers, or indeed all of any profession? I'm not in this business to be universally loved, but I'm not trying to pander to public sentiment. I would like, however, to be viewed as honest and hard working and to be respected for what I do, or try to do, to the best of my abilities. In the current climate, the physician is portrayed (in advertising, press, radio, and television) as a potential crook. We hear of Medicare fraud, of Medicaid fraud, of "needless surgery," of excessive fees, of professional incompetence; we are advised on television that several aggressive attorneys will, at no cost for consultation, review Workmen's Compensation claims, automobile liability claims, driving while intoxicated charges, and medical malpractice claims. As they say on "The People's Court" television program, "Take them to court."

The whole area of physicians' fees gets a great deal of public attention, and indeed it should. We recently were advised that both General Motors and Chrysler will increase their automobile prices 3 to 7 percent next year. All other services expect escalating costs, as well. Federal, state, and municipal employees want more money and probably deserve it. In fact, everyone wants more money. Let me assure you, if I could find a way to increase my fees and find a way for the patient to be able to pay for them, I would have done it yesterday.

A $148,000 medical malpractice insurance premium is mind boggling. Perhaps we should take comfort in the fact that the cost for far less insurance in New York for a neurosurgeon is $101,000 for one person, and it is anticipated that this will be increased by at least 30 percent next year. I suppose I should take heart in the statement from our Maryland General Assembly that "just because it happens in New York or California doesn't mean that it will happen in Maryland." I didn't believe that in 1975 or 1980, and I don't believe that now. It has happened here, and the tide continues to roll in and over us.

Concerning fees, some little-known data might well be brought out:

- Approximately 40 percent of the population in Maryland is covered by Medicare, and Medicare fees have been frozen by federal mandate at levels several years old for a couple of years. One may not bill a Medicare patient for any balance due (with the exception of the deductible and coinsurance) if you are a Medicare participating physician.
- Blue Cross and Blue Shield is the largest single health insurance organization in Maryland. If one participates with Blue Shield, one is paid directly by the company on either an out-of-date profile system or an out-of-date fee schedule system. These profiles were to be modified yearly but are also frozen.
- For patients covered under Workmen's Compensation, State Accident Fund, and other programs, the fees paid are at a level also many years old. Incidentally, the Workmen's Compensation Fee Guide was published initially as just that—a fee guide. Most companies view this as a fee schedule, and indeed there is a letter of interpretation from

a representative of Attorney General Steve Sachs' office that it is to be viewed as a fee schedule. There is quite a difference. The fee guide was not promulgated as a schedule, but so be it. The guide was to be updated periodically, but has not been for several years. These fees are frozen as well.

- The patients covered by the State of Maryland Medicaid program are another kettle of fish. The Medical Assistance fees are paid at the rate of about ten to fifteen cents on the dollar. As I read of people collecting thousands of dollars from Medicaid, I have to wonder just how? The fees paid by Medicaid *in toto* for a given procedure barely match the prorated number of dollars necessary to cover those procedures. At the new projected medical malpractice insurance level, it will cost us approximately $300 per procedure (prorated) to be able to insure ourselves. One can only anticipate the response from all concerned if we were to add electively a $300 surcharge on each procedure for our liability insurance coverage. I'm afraid that just wouldn't fly.
- An increasing number of other third-party insurance carriers, self-insured companies, union insurance plans and commercial insurance companies, are using co-insurance or patient deductible provisions in the new contracts with their labor forces. They will pay 80 to 85 percent of the fee submitted (or of their own fee schedule) for a given procedure, and the patient is theoretically responsible for the rest. I can't comment on other areas of practice, but many of our patients simply don't have the funds to pay this difference, so these fees are also in essence, frozen.

Questionable Future

What does the future hold for us in Maryland? We are faced with a decreasing patient base (secondary to the increasing impact of HMOs, PPOs, and hospital competition, a decreasing revenue source (frozen funds and frozen fee schedules), an increasing frequency of claims concerning medical malpractice, and increasing size of judgments, increasing malpractice insurance costs, and increasing overhead cost level just to remain in business. Where does it stop? I don't know. We do know that some things that "couldn't happen here in Maryland" have, in fact, happened. For the first time in Maryland, there are two reported cases of judgments against physicians in excess of the physicians' insurance coverage and of claims against their personal assets. The most recent case was a judgment in excess of coverage over $700,000. Without commenting on the merits or their lack in this particular case, one has to wonder (in horror) how one could satisfy such a judgment. How could I? How could you? How could any of us? Nevertheless, it is a prospect that lives with us daily.

What possible solutions can be entertained? I read recently that our governor is to appoint yet another Malpractice Study Task Force. We had one just last year that made a number of recommendations to the General Assembly, but few of these recommendations (however well-intended) made it to the light of day in Annapolis. Other states, including California, New York, Florida, and Louisiana, have attempted to deal more strongly in this area, and with some notable successes:

- Periodic payment schedules are becoming more common.
- Collateral source rules are changing.
- The definition of "expert testimony" is being codified by statute.
- Limits are being placed on so-called "pain and suffering" damages.
- There is economic recovery for economic loss.
- The Standard of Care is being redefined to local or regional, opposed to national or international; to reasonable versus ideal.
- Attorneys' compensation is being structured on a sliding scale to a decreasing percentage of the recovery, as opposed to 40 percent or more of the total award.

Concerning the "contingency fee system" of attorney compensation, I know of no other issue so dear to the hearts of most physicians. While I do not view it as benignly as do some representatives of organized medicine, I'm not at all certain just how contributory it is to the current morass. On the one hand, the attorney may state that it is required to allow the aggrieved patient with no funds an opportunity to have a day in court when he/she would have been unable to do so without this provision. On the other hand, it seems grossly out of line for the attorney to keep 30 to 40 percent (off the top) of an award presumably being granted to the wronged or injured patient or his/her family. One can argue this point until one is blue in the face without changing anyone's mind. Nevertheless, in other states and other jurisdictions, this issue has been faced legislatively with laws now restricting the percentage the attorney will receive, on a sliding scale: X percentage of the first thousands of dollars; and a progressively decreasing percentage on the remainder of the award. Presumably, this would allow the patient or family to receive more of the actual award themselves.

At one time an award of $1,000,000 was astronomi-

cally high, but that is no longer the case nationally or here in Maryland. It is no longer uncommon to read of awards in the millions, some from the Health Claims Arbitration Office, and some from the courts. I know of no one (be they lawyer, physician, judge, or ordinary citizen) who can place a dollar value on noneconomic loss (pain, psychological stress, actual physical harm), although various actuaries can semiqualify the actual potential economic loss. Even though any dollar amount for the noneconomic loss is arbitrary, more and more it seems as if some of the awards are punitive in both concept and result.

Recently I was advised that one of the more visible attorneys stated that the Contingency Fee System was actually in society's best interest. In essence, he stated he was able to act as a screen against frivolous claims. Further questioning on this topic is alleged to have elicited the statement that he is not interested in claims with little dollar value or in marginal claims. It always has seemed a bit hypocritical to justify the contingency fee system so that everyone may have his/her day in court, but to qualify this noble sentiment by allowing that there had better be dollars in it for the attorney or it wasn't worth pursuing is unconscionable.

Some years back (in the late 1970s) then State Senator Harry McGuirk made a most prophetic statement: he saw no real solution to the medical malpractice problem until society was ready to deal with the whole concept of product liability reform; only then would this become a citizen issue. At every hand, the plaintiff's bar makes the pleading that there is no reason for this element of tort law to be treated differently from other areas of tort law. One can only try to make a case that perhaps this is a different aspect of tort law because the problems involved are so different. Should the incompetent and careless physician be held accountable for his/her actions? Yes. But at what point does an error in judgment represent medical negligence? There is an old medical axiom that we like to pride ourselves on having good judgment based on wide experience. The corollary is that this wide experience frequently is based on episodes of what turned out to be errors in judgment. We learn, we progress, we refine our judgments, and indeed that is what our residency training programs are designed to help us do at the beginnings of our careers. But the practice of medicine (be it surgical or nonsurgical) is an ongoing training program allowing us to continue to define and enhance our abilities to make good judgments and act accordingly on them. Is every "bad baby" the fault of the obstetrician? Patently, no. Is every "poor result" the fault of the physician? Again, no.

Do I have a solution for this problem that would be fair to both patient and health care provider? I don't know that I do, but I do know the current climate is causing good physicians to retire far earlier from their practices than either they or their patients would like. Many say they can no longer afford to continue to practice, and indeed, I'm not sure how much longer the citizens of this state can afford this social experiment in compensation.

As I have told my son on occasion in the past, he is teaching me the fundamental difference between the terms optimism and hope. I still have hope, and I hope that the collective wisdom of our elected officials and judicial authorities can lead us out of this wilderness.

In February . . .

"A Well Doctor's Family: The Struggle for Intimacy"
Merville O. Vincent MD

Insulinoma in a Patient with the MEN Type I Syndrome

STUART HENOCHOWICZ MD and ROBERT J. TANENBERG MD

Multiple Endocrine Neoplasia Type I (MEN I) is a familial syndrome of endocrine tumors first described by Wermer[1] and Moldawer[2] in 1954. It is an autosomal dominant disorder with a high degree of penetrance characterized by the presence of pituitary, pancreatic, and parathyroid adenomas.[3] Other endocrine glands are less commonly involved (Table 1). Insulin secreting tumors (insulinomas) in the setting of the MEN I syndrome are generally multiple and benign.[4] Neurologic, psychiatric and visual disturbances relieved by eating have been noted.[5] Symptoms related to hypoglycemia often are not specific; the diagnosis of insulinoma on occasion has been made more than three years after the onset of symptoms.[5]

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E.V. is a twenty-one year old man who presented to Washington Hospital Center on 3/10/84 with complaints of headache, fatigue, increased appetite, and a one hundred forty pound weight gain over two years.

The patient initially presented to medical attention in December 1981 with complaints of confusion and inability to concentrate. A serum calcium of 11.8 mg/dl was noted at that time. He was admitted to another hospital where he underwent a parathyroidectomy with removal of 3½ hyperplastic glands and was discharged in January 1982.

Since discharge, the patient complained of severe headaches and of unusual episodes of confusion and blurred vision. Both were most severe in the morning and were relieved by eating.

The patient was readmitted to the hospital on 8/83 with a diagnosis of acute psychosis. Despite fasting hypoglycemia, a three-day fast was thought to be nondiagnostic for an insulinoma, and he was discharged with psychiatric follow-up.

The patient was referred to an endocrinologist in late February 1984 for further evaluation of hypoglycemia. He then was admitted to the Hospital Center for diagnosis and therapeutic intervention.

The family history over six generations is remarkable for the presence of parathyroid, pituitary, pancreatic, and other endocrine tumors consistent with the MEN I syndrome (see Figure 1, next page.) The patient and all family members involved have lived in the Hagerstown, Maryland area.

Physical examination revealed a markedly obese young man in no acute distress. The temperature was 97 degrees orally. The blood pressure was 140/90 mmHg. The patient's weight was 340 pounds. The physical exam was otherwise unremarkable.

Laboratory exam was remarkable for fasting blood sugars below 50 mg/dl, serum insulin to glucose ratios ranging from 0.3 to 0.5 (normal < .3) and a C-peptide level of 1.7 ng/ml (normal 0.2 to 1.3 ng/ml) (see Table 2). Serum prolactin, cortisol, gastrin, and growth hormone levels were all within the normal range.

CT scan of the abdomen revealed a 3 cm focal enlargement of the body of the pancreas. Celiac angiography revealed a 1 cm tumor in the head and a 3 cm tumor in the body of the pancreas.

The patient underwent an 85 percent distal pancreatectomy with enucleation of tumor mass of the head of the pancreas (Figure 2). Pathology revealed multiple

Table 1. MEN I Syndrome

Hyperparathyroidism (parathyroid adenoma, hyperplasia)
Pancreatic tumors (gastrinoma, insulinoma)
Pituitary tumors (prolactin, ACTH or growth hormone secreting adenomas)
Carcinoid tumor, thyroid adenoma, lipoma, adrenal cortical adenoma

Table 2. Results of Serum Glucose and Insulin Levels During a 48-Hour Fast

Day	Fasting Blood Sugar (mg/dl)	Serum Insulin Level (microunits/ml)	Insulin/Glucose Ratio
3/11	48	17.2	0.36
	50	20.0	0.40
3/12	50	10.0	0.50
	39	11.2	0.30

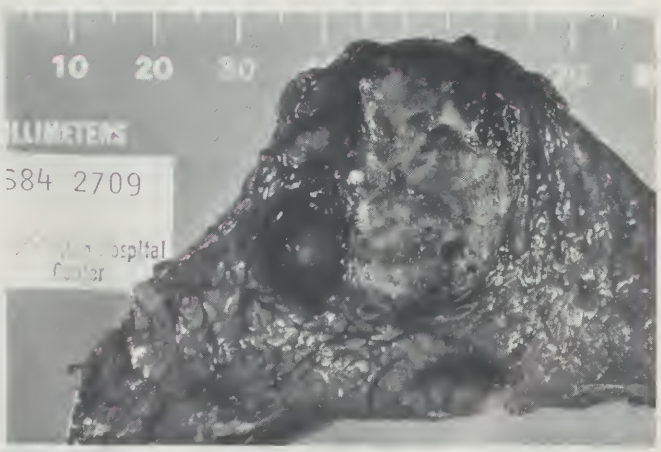


Figure 2. Gross specimen revealing 3 cm midbody tumor.

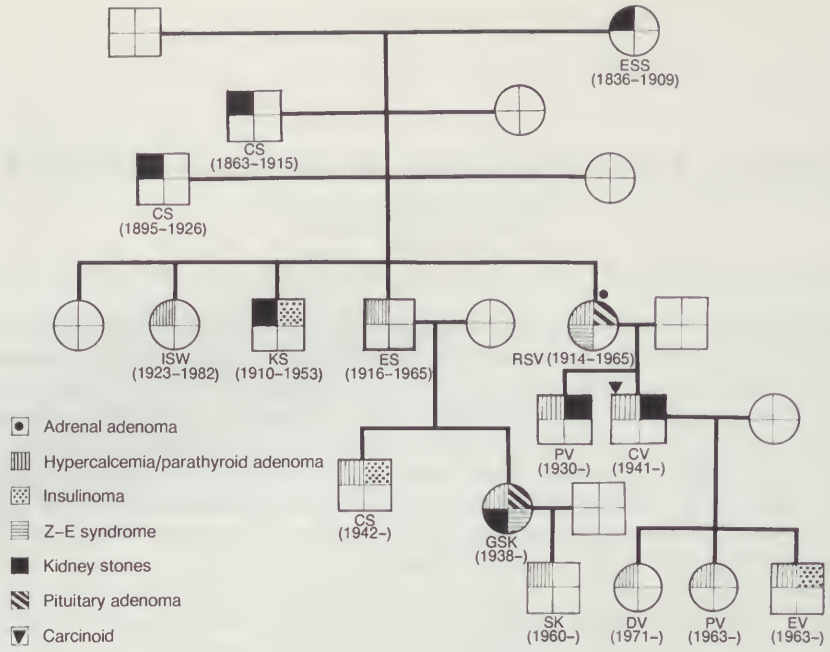


Figure 1. Family tree illustrating MEN I syndrome in Western Maryland.

islet cell tumors with the largest located in the body of the pancreas. Immunohistochemical studies revealed abundant immunoreactive insulin within the midbody islet cell tumor. Plasma and tissue insulin and glucagon levels are presented in Table 3. Postoperatively, the patient was and remains asymptomatic. He has lost seventy pounds over the past six months. Fasting blood sugar, serum growth hormone, prolactin, gastrin, cortisol, T_3 and T_4 levels all are in the normal range.

Table 3. Serum and Tissue Insulin and Glucagon Levels

Source	Insulin	Glucagon
Pancreatic tumor	76.4 units/gm (nl: 1–2 units/gm)	110 micrograms/gm (nl: < 5 micrograms/gm)
Plasma (pre-operative)	20 units/ml (nl: 20 units/ml)	295 picograms/ml (nl: < 300 picograms/ml)

Discussion

Insulinoma may present with a variety of neurologic, visual, and psychiatric disturbances. Headache, diplopia, and blurring of vision have been noted with varying frequency.[4,5] Rarely are patients diagnosed with acute psychosis or hysteria.[4] Neurologic findings of peripheral sensory neuropathy, seizures, hemiparesis, and ataxia also have been noted.[5] Signs and symptoms of insulinoma invariably bear a temporal relationship to hypoglycemic episodes; clinical improvement results from ingestion of carbohydrates. Weight gain and hyperphagia, therefore, are common findings with this endocrine tumor.

Symptomatic hypoglycemia in association with inappropriately high insulin levels after prolonged fasting strongly suggests the diagnosis of insulinoma. An insulin/glucose ratio of 0.3 or greater is considered abnormal.[3] An amended insulin/glucose ratio, derived by multiplying the immunoreactive insulin level by 100, dividing by the glucose level and then subtracting by 30 also is used. This amended ratio is based on the finding that when the serum glucose level in normal human subjects is 30 mg/dl or less, the immunoreactive insulin level is 0 to 1 microunits per ml.[6,7]

Exogenous hyperinsulinism can be excluded by finding high proinsulin and C-peptide levels[3,7] or suggested by detection of anti-insulin antibodies.[8] In questionable cases, provocative testing with tolbutamide, glucagon, and leucine has confirmed the diagnosis of insulinoma.[4,7] However these tests may provoke severe symptomatic hypoglycemia, and now are rarely used. The lack of C-peptide suppression by exogenous insulin injection also supports the diagnosis of insulinoma.[9] Hypoglycemia may be prevented by the use of the glucose clamp technique in conjunction with the suppression test.[9]

CT scanning of the abdomen may detect a pancreatic tumor. However, a negative scan does not rule out the diagnosis.[3] Angiography is of variable use in detecting and localizing tumors.[3] Transhepatic portal venous insulin determinations are very helpful in tumor localization and detection.[10] Intraoperative palpation of a pancreatic mass still remains the most sensitive technique of tumor detection.

Multiple foci of insulin secreting tumors of the pancreas with concomitant glucagon secretion (as seen in our patient) is a common finding in the MEN I syndrome.[7] As such, subtotal pancreatectomy generally is required. Patients with insulinoma occasionally may be successfully managed with diazoxide, a hyperglycemic agent, and streptozotocin.[7] Chemotherapeutic drugs such as mithramycin, Adriamycin, streptozocin, and fluorouracil have been used for treating patients with malignant tumors.[11–14]

Serial monitoring of serum calcium, prolactin, gastrin, T_3 and T_4, and growth hormone often is useful in

following patients with the MEN I syndrome. When symptoms warrant, a more extensive work-up is indicated.

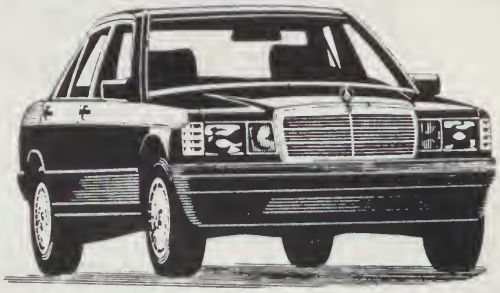
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References

1. Wermer, P. "Genetic Aspects of Adenomatosis of Endocrine Glands." *Am J Med* 16(1954):363–71.
2. Moldawer, M.P.; Nordi, G.L.; Roker, W. "Concomitance of Multiple Adenomas of the Parathyroids and Pancreatic Islets with Tumor of the Pituitary: A Syndrome with Familial Incidence." *Am J Med Sci* 228(1954):290–306.
3. Boyd, A.E. "Recent Developments in the Diagnosis, Management, and Cell Biology of Insulinoma: Lessons Learned from a Family with Multiple Endocrine Adenomatosis Type I." *Med Grand Rounds* 3(1984):105–17.
4. Service, F.J.; Dale, A.J.D.; Elvebach, L.R.; Jiang, N.S. "Insulinoma: Clinical and Diagnostic Features of 60 Consecutive Cases." *Mayo Clin Proc* 51(1976):417–29.
5. Doggett, P.; Nabarro, J. "Neurological Aspects of Insulinomas." *Postgrad Med J* 60(1984):577–81.
6. Fajans, S.S.; Floyd, J.C., Jr.; Vij, S.K. "Differential Diagnosis of Spontaneous Hyperglycemia." *Endocrinology and Diabetes*, L.J. Krystom; R.A. Shaw (eds.). New York, Grune and Stratton, 1975.
7. Fajans, S.S.; Floyd, J.C., Jr. "Diagnosis and Medical Management of Insulinomas." *Annu Rev Med* 30(1979):313–29.
8. Bowman, W.A.; Yalow, R.S. "Differential Diagnosis Between Endogenous and Exogenous Insulin Induced Refractory Hypoglycemia in a Non-Diabetic Patient." *N Engl J Med* 303(1980):198–99.
9. Reynolds, J.H.; Kaminsky, N.I.; Schade, D.S.; Eaton, R.P. "Use of a Computerized Glucose Clamp Technique to Diagnose an Insulinoma." *Ann Intern Med* 101(1984):648–49.
10. Roche, A.; Raisonnier, A.; Gillon-Savouret, M.C. "Pancreatic Venous Sampling and Arteriography in Localizing Insulinomas and Gastrinomas: Procedures and Results in 55 Cases." *Radiology* 145(1982):621–27.
11. Schein, P.S. "Chemotherapeutic Management of the Hormone Secreting Endocrine Malignancies." *Cancer* 30:1616–26.
12. Eastman, R.C.; Cane, S.E.; Strewler, G.J., *et al.* "Adriamycin Therapy for Advanced Insulinoma." *J Clin Endocrinol Metab* 44(1977):142–48.
13. Kiang, D.T.; Frenning, D.H.; Bauer, G.E. "Mithramycin for Hypoglycemia in Malignant Insulinoma." *N Engl J Med* 299 (1978):134–35.
14. Moertel, C.G.; Hamley, J.A.; Johnson, L.A. "Streptozotocin Alone Compared with Streptozotocin Plus Fluorouracil in the Treatment of Advanced Islet-Cell Carcinoma." *N Engl J Med* 303(1980):1189–94.

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Sleep Apnea in Five Patients Evaluated for Nocturnal Penile Tumescence

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Since discovery of the relationship between nocturnal penile tumescence (NPT) and rapid eye movement (REM) sleep almost 20 years ago, monitoring NPT has become an essential clinical test to differentiate psychogenic and organic impotence. Although the technique does not identify specific organic factors as the cause of impotence, it does provide physiological documentation of the presence or absence of tumescence without the inherent problems (such as embarrassment or performance anxiety) that confounded previous methods of evaluating tumescence functioning (for example, masturbation, viewing erotic material). While using this technique at a sleep facility to evaluate patients complaining of impotence, we found the additional monitoring of respiratory signal facilitated the diagnosis of sleep apnea syndrome in 5 of 30 consecutive patients (17 percent).

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Sleep apnea syndrome is a recently discovered disorder characterized by repeated cessation of respiratory air exchange at the nose and mouth. Two principal causes are occlusion of the upper airway (obstructive apnea) and complete cessation of respiratory effort (central apnea). Sleep apnea syndrome has been associated with disorders ranging from sexual dysfunction to cardiac arrhythmias and cardiac and respiratory arrest.

A review of the literature found that although a breathing disorder might have been suspected in some impotence cases, there were no published reports of routine respiratory signal monitoring during NPT polysomnography. A study of 25 males with obstructive sleep apnea, found that twelve patients (48 percent) gave a history of impotence.[1] Schmidt and Wise (1981), studying patients with impotence, found seven had impaired penile tumescence and six had psychogenic impotence. The seven patients with impaired penile tumescence had significantly more apneic episodes than the six patients with psychogenic impotence. The authors noted that "respiratory monitoring clearly differentiated the impaired penile tumescence group from the psychogenic group."[2]

Methods

Thirty consecutive patients referred by physicians for NPT evaluation were studied with the addition of respiratory signal monitoring. All patients initially were assessed by a psychologist specializing in sleep disorders and were given a battery of psychological tests: The Minnesota Multiphasic Personality Inventory (MMPI), the SCL-90, the Holmes-Rahe Life Events Scale, and the Cornell Medical Index Health Questionnaire. Extensive medical and social histories also were obtained.

All patients were monitored for one night in the sleep laboratory on a Beckman R611 eight-channel chart recorder with the following measurements: two channels of electroencephalogram, sites CZ-A1, 02-A2; electro-occulogram; electrocardiogram, modified lead V6; thermistor to record respiratory timing and direction of air motion (air exchange); and two mercury-filled strain gauges to measure tumescence. One strain gauge was placed one-inch below the tip and the other was placed at the base of the penis.

A significant erection is defined as a minimum of 16 to 20mm increase in penile tip circumference, based on Karacan's findings that a 16 to 20mm increase is sufficient for vaginal penetration in 90 percent of the patients he tested.[3,4] A diagnosis of sleep apnea syndrome is made when respiratory air flow ceases for at least 10 seconds on a minimum of 30 occasions during a single night's sleep. In an effort to assess the severity of sleep apnea syndrome investigators now use an Apnea Index (AI). The AI for a patient is the total number of apneic episodes divided by the total number of minutes spent asleep multiplied by 60. This gives the number of apneas per hour of sleep. According to Guilleminault an AI of five or less is within normal limits for most individuals.[5]

Results

Patient #1 is 42-year-old black male 70.5 inches tall, weighing 230.5 pounds (129 percent ideal body weight). He has a history of diabetes and hypertension, which are controlled with medication (diazide for hypertension and insulin for diabetes). He did not take medication the day of the study. The patient reported difficulty obtaining an erection for two years prior to the study; at the time of study he was essentially unable to obtain an erection.

On psychological battery, this patient showed elevation on the paranoid ideation and psychoticism scales on the SCL-90 and elevation on the psychopathic de-

viate and schizophrenia scales on the MMPI.

The patient demonstrated partial erections during two of four significant REM periods and a near full erection in one. During sleep, his respiratory signal ceased approximately one to two times each minute throughout the entire study period (AI = 89.4). Apneas ranged between 6 and 52 seconds in duration with an average episode of 23 seconds. During the apneic episodes he had sinus arrhythmia ranging from 43 to 100 with an average of 55 to 85 per minute. The sleep study indicated this patient's impotence is of psychogenic origin because he demonstrated a near full erection during one of the REM periods. However, he did demonstrate sleep apnea. No treatment has been instigated for the patient's complaint of impotence at this time.

Patient #2 is 56-year-old black male 71 inches tall, weighing 202 pounds (112 percent ideal body weight). Other than a stomach ulcer, he had no major health problems. For three years prior to the sleep study he had increasing difficulty with obtaining and maintaining an erection.

On the psychological battery his MMPI showed elevated scales for hypochondriasis, depression, psychopathic deviate, and schizophrenia. On the SCL-90 he had an elevated psychoticism scale.

Because this patient was awake for 32 percent of the initial study period, a repeat study was performed. The penile tumescence data is from both study periods; the respiration data is from the second night only. The patient had eight REM periods throughout the two study periods. During five REM periods he had one nearly full erection, two half-full erections, and two partial erections (as evaluated by the patient and the technician). In addition, while awake and in stage 2 sleep he had two nearly full erections. Both erections occurred immediately following REM periods. During the second night's sleep study his respiratory signal ceased on 350 occasions (AI = 57.2). Average duration of apneic episodes was 31 seconds with a minimum of 10 seconds and a maximum of 80 seconds. He also had sinus arrhythmia and five premature atrial contractions. Results of the study indicated that this patient's impotence was of psychogenic origin. (However, it was after testing this patient that we first began to formulate the hypothesis of a relationship between sleep apnea and impotence.) This patient was referred for a pulmonary evaluation at the time of the study. He did not return to the urology clinic following the referral.

Patient #3 is a 66-year-old white male 69.5 inches tall, weighing 219 pounds (122 percent ideal body weight). He had prostate surgery twice in the previous year. He underwent heart surgery in 1980 following which he had a postoperative stroke. Sleep generally was not restful for him. His chief complaint was that he woke at night with painful erections. When he awoke he customarily measured his pulse and blood pressure. He reported that the painful erections occurred simultaneously with increased heart rate and blood pressure.

On the psychological test battery, his MMPI showed elevation on the depression, psychasthenia, and schizophrenia scales. The SCL-90 was unremarkable.

The patient had three REM periods totalling 96 minutes. He had no significant increase in tumescence during the study period, although he did experience painful penile spasms and the sensation of increased heart rate. During the sleep study the respiratory signal ceased on 214 occasions (AI = 29.4). The average length of each apnea was 27 seconds with a minimum of 12 seconds and a maximum of 40 seconds. The patient had 36 premature ventricular contractions, five premature atrial contractions, sinus arrythmia, and a five-second period of tachycardia (100 bpm). Results of the sleep study indicated that this patient was suffering from nocturnal panic attacks (fear of losing one's breath) during REM sleep as well as possible cardiophobia, which he associated with nocturnal erections. He also demonstrated sleep apnea.

Patient #4 is 56-year-old white male 70 inches tall, weighing 200 pounds (112 percent ideal body weight). He had a previous commisurotomy and femoral artery bypass surgery. He also had a history of alcohol and drug abuse. For four and a half years prior to the study he had increasing difficulty obtaining and maintaining an erection.

On the psychological test battery, his MMPI showed elevation on the hypochondriasis, depression, psychopathic deviate, masculinity-femininity, and hypomania scales. The SCL-90 was unremarkable.

He had five REM periods; during two he obtained partial erections. During the sleep study, the respiratory signal ceased on 99 occasions (AI = 13.8). Average length of the apneic episodes was 18 seconds, with a minimum of 8 seconds and a maximum of 35 seconds. He also had many premature ventricular contractions during the study period. Results of the sleep study indicated that the patient had impotence of organic origin and mild sleep apnea. This patient received a penile prosthesis implant.

Patient #5 is a 48-year-old nonobese white male. He is a recovered alcoholic who has not had a drink in three years. Since age 21, this patient had "prostate trouble" for which he had been seeing a urologist. For five years prior to the study, he had trouble obtaining a full erection. The difficulty had gotten worse in the latter two years. He was receiving treatment for a prostate infection at the time of the study.

On psychological battery, the patient showed elevation on the psychoticism scale on the SCL-90 and

elevated depression, psychopathic deviate, schizophrenia, and social introversion scales on the MMPI.

The patient demonstrated almost no tumescence (a maximum 5 to 8mm change in circumference) during two REM periods. While asleep, his respiratory signal ceased on 38 occasions for a minimum 9 seconds and a maximum of 30 seconds (AI = 9.9). Apneas averaged 18 seconds in duration and occurred during all sleep stages. He had sinus arrhythmia cycling two to three times each minute throughout the night. Heart rates during these arrhythmias ranged from 54 to 100 per minute with an average of 65 to 85 per minute. Results of the sleep study indicated that the patient's impotence is of organic origin but also is aggravated by psychological factors. He demonstrated mild sleep apnea as well. The patient never returned to the urology clinic for a follow-up to the sleep study.

Discussion

Routine addition of respiratory signal monitoring during NPT evaluations identified five of thirty patients who also had sleep apnea (Table). However, respiratory signal, which is a measure of temperature change at the airway opening, does not distinguish between central and obstructive apnea. Therefore, we only were able to state that these patients had sleep apnea syndrome. Patients 1, 2, and 3 had sleep apnea syndrome that affected daytime alertness; all three reported a history of excessive daytime sleepiness. Patients 4 and 5 had mild sleep apnea; neither reported excessive daytime sleepiness. All patients reported sexual dysfunction as a primary complaint. It has been found that sleep apnea syndrome and impotence are clinically correlated.[1,2,6]

Several theories have been proposed for this relationship. It has been speculated that both obstructive and central sleep apnea are secondary to a central nervous system lesion.[7] This raises the possibility that in some cases both apnea and impotence could be due to a common lesion. Alternatively, Timms[8] proposes that in some patients impotence may be linked to a state of chronic hypoxemia similar to that demonstrated by patients with sleep apnea syndrome. The patient may be unable to meet the physiological demands of sexual intercourse.

Table. Patient Data Summary

Patient	Initial Complaint	Excessive Daytime Sleepiness	Erections	Apnea	AI
1	Impotence	+	+	+	89.4
2	Impotence	+	+	+	57.2
3	Painful nocturnal erections	+	−	+	29.4
4	Impotence	−	−	+	13.8
5	Impotence	−	−	+	9.9

The discovery of sleep apnea syndrome in such a large proportion (17 percent) of the patients referred originally for evaluation of NPT indicates the importance of assessing the presence of sleep apnea syndrome in patients with impotence. A short history should be obtained routinely, using the list of symptoms commonly associated with sleep apnea:

1. Snoring (unusually loud or great)
2. Excessive daytime sleepiness (especially at hazardous or embarrassing times)
3. Restless sleep and somnambulism (sleep walking)
4. Morning headaches
5. Personality change
6. Apparent intellectual deterioration (including memory loss)
7. Obesity or recent weight gain

If the patient's history indicates sleep apnea syndrome, further monitoring of respiration should be obtained. Conversely, sexual function should be addressed in patients suspected of having sleep apnea syndrome since many patients will not volunteer this information. In patients being assessed for NPT we recommend respiratory monitoring in addition to the standard measures.

References

1. Guilleminault, C.; Eldridge, F.L.; Tilkian, A.; Simmons, F.G.; and Dement, W.C. "Sleep Apnea Syndrome Due to Upper Airway Obstruction (A Review of 25 Cases)." *Arch Int Med* 137(1977):296–300.
2. Schmidt, H.S. and Wise, H.A. "Significance of Impaired Penile Tumescence and Associated Polysomnographic Abnormalities in the Impotent Patient." *J Urol* 126(1981):348–52.
3. Karacan, I. "Evaluation of Nocturnal Penile Tumescense and Impotence." In: Guilleminault, C. *Sleeping and Waking Disorders, Indications and Techniques.* Melnow Park, CA: Addison-Wesley Co., 343–71, 1982.
4. Karacan, I. "The Role of the Sleep Laboratory in the Diagnosis and the Treatment of Impotence." In: Williams, R.L. and Karacan, I. *Sleep Disorders, Diagnosis and Treatment.* New York: John Wiley and Sons, 353–82, 1978.
5. Guilleminault, C. *Sleeping and Waking Disorders, Indications and Techniques.* Melnow Park, CA: Addison-Wesley Co., 155–85, 1982.
6. Hudgel, D.W. and Shucard, D.W. "Coexistence of Sleep Apnea and Asthma Resulting in Severe Sleep Hypoxemia." *JAMA* 242(25)(1979):2789–90.
7. Peale, T.L. *The Neuroanatomic Basis for Clinical Neurology.* New York: McGraw-Hill Co., 156–60, 1977.
8. Timms, R.M. "Sexual Dysfunction and Chronic Obstructive Pulmonary Disease." *Chest* 81(4)(1982):398–9.

Case Report: Choriocarcinoma of the Stomach

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A 30-year-old black male was admitted to the hospital for evaluation of gynecomastia, abdominal pain, and weight loss.

He had been well until three months earlier when he noticed a painful enlargement of both breasts and loss of appetite. For the last ten years he smoked a half pack of cigarettes a day and consumed alcohol moderately.

On physical examination, he was emaciated. Temperature was 37°C, pulse 80 per minute, and blood pressure 110/80 mmHg. There was no lymphadenopathy. The breasts were enlarged, firm, and tender. The heart and lungs were normal. An examination of the abdomen revealed a hard, tender liver. External genitalia, including testes, were normal. A rectal examination was normal, and stool for occult blood was positive.

The laboratory data revealed a hemoglobin of 10.2 gm/dl, white blood cells 10.900/cu mm, and erythrocyte sedimentation rate was 48 mm/hr. The prothrombin time was normal. Liver function tests revealed normal transaminases and bilirubin, albumin 2.7 gm/dl, globulin 2.5 gm/dl. The alkaline phosphatase was elevated to twice normal. A chest x-ray was normal. An upper gastrointestinal barium study revealed irregularly thickened gastric folds in the proximal stomach. An abdominal CAT scan revealed hepatomegaly with space-occupying lesions, and the gastric wall was thick. The serum beta HCG (human chorionic gonadotropin) was 120,000 MIU/ml. Since he refused endoscopic examination of the stomach, a percutaneous liver biopsy was performed. The liver biopsy showed anaplastic giant syncytiotrophoblast cells consistent with metastatic choriocarcinoma; chemotherapy was begun.

The patient developed mild gastrointestinal bleeding and an esophagogastroduodenoscopy was performed. On endoscopy, a large, infiltrating neoplasm was noted in the proximal stomach on the lesser curvature. Multiple biopsies were obtained. The gastric biopsies were consistent with choriocarcinoma; hence, a diagnosis of choriocarcinoma of the stomach metastasized to the liver was made. Despite aggressive therapy, the patient had a downhill course and expired.

Discussion

Choriocarcinoma of the stomach is a rare clinical entity.[1] Since most reported cases are associated with adenocarcinoma of the stomach, they are considered to represent a highly differentiated metaplasia of gastric neoplasms.[1-3] This recently has been studied by immunohistological technique. Beta HCG was identified by both immunofluorescence and immunoperoxidase method exclusively within the choriocarcinomatous portion of the tumor, both in trophoblast tumor giant cells and mononuclear cytotrophoblast cells as well as within morphologically typical gastric carcinoma cells.[23] An elevated beta HCG is seen in most cases. Choriocarcinoma of the stomach metastasizes mainly by hematogenous route to the liver and lung, unlike adenocarcinoma, which has a tendency to metastasize to the regional lymph nodes.[1] Prognosis of the disease remains dismal.

References

1. Jindrak, K.; Bochetto, J.F.; and Alpert, L.I. "Primary Gastric Choriocarcinoma: Case Report with Review of World Literature." *Hum Pathol* 7(1976):595-604.

2. Smith, F.R.; Barkin, J.S.; and Hensley, G. "Choriocarcinoma of the Stomach." *Am J Gastroenterol* 74(1980):45-8.

3. Saigo, P.E.; Brigati, D.J.; Sternberg, S.S.; Rosen, P.P.; and Turnbull, A.D. "Primary Gastric Choriocarcinoma: An Immunohistological Study." *Am J Surg Pathol* 5(1981):333-42.

MIEMSS: Topics of Interest

The Banking and Clinical Use of Human Skin Allograft in Trauma Patients: History

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The skin is the largest organ of the body. In many ways, functions of the skin are as vital to survival as functions of the kidneys and liver. One would die as surely without skin (although less immediately) as without the heart or lungs.

Skin allows the body to retain its vital fluids, minerals, and chemicals. The great physiologist Claude Bernard stated that skin maintains an internal environment for the body, likened to the primeval environment of the sea. At the same time, it protects the body against the elements and the dangers of omnipresent microorganisms that would kill the organism from without even if the vital materials lost by its absence could be replaced.

The clinical setting in which massive skin loss is most commonly seen is thermal burn injury. It seems logical that physicians dealing with this difficult problem, particularly before the advent of antibiotics, would attempt to substitute other tissue for lost skin. Although surely it was considered and almost certainly attempted earlier, Girdner first reported the use of allograft* skin in the treatment of a full-thickness skin loss in 1881.[1] Although Baronio first found that skin could be grafted from one part of a sheep to another in 1803,[2] Girdner attempted the first clinical use of allograft only 12 years after the introduction of the split-thickness skin graft by Reverdin[3] and virtually contemporaneously with the work of Wolfe[4] and Thiersch.[5]

First Clinical Use

Girdner's patient was a young man who had the misfortune of leaning against a door sill when it was struck by lightning. He sustained a full-thickness loss of the skin of his left shoulder and arm. His wound had not healed after several weeks of various treatments. About this time, a second patient was admitted to Dr. Girdner. This patient was a suicide victim who died after cutting his throat. Several hours after the death, Girdner harvested the suicide victim's skin to use as a skin graft on the burn victim.

To Girdner's amazement, a large portion of the cadaveric skin "took" to the burn patient's wound, resulting in a closed wound and generalized improvement of the patient. This continued until an "erysipelatous inflammation" developed between the second and third weeks, probably a rejection phenomenon. The patient's condition improved to the degree that his wounds healed successfully, and he survived.

After that time, sporadic reports in the literature described use of allograft skin in the treatment of skin loss, primarily due to burns. Bettman reported the use of allograft skin from the parents of two children who suffered burns over more than 60 percent and 80 percent of their body surface areas, respectively. These injuries almost certainly would have been fatal without the allograft skin, but these patients also survived.[6]

In 1944, Webster described placing portions of patients' skin grafts in a refrigerator for varying lengths of time until portions of their wounds were more ready for grafting than when the autografts originally were harvested.[7] He found that skin kept in the refrigerator for up to three weeks would still "take" and remain viable.

Allograft skin was not used routinely in the treatment of burn injuries until Brown and his associates in St. Louis began using it in their burn unit.[8] Around the time of Brown's report, allograft skin was introduced as routine therapy for the burn patients at Brooke Army Hospital.[9] The 10-year experience of its use at Brooke was reported by Zaroff *et al.* in 1966.[10] In that article, Zaroff listed the benefits realized by the patients treated with the allograft skin:

1. Limitation of infection and keeping the bed mechanically clean
2. Decrease in water, electrolyte, and protein loss
3. Decrease in energy requirements secondary to the calories necessary for the large obligatory loss of free water through the open wound
4. Reduction of pain, allowing exercise and ambulation, and decrease in the incidence of contractures
5. Conservation of autograft
6. Improvement in appetite and general welfare
7. Improvement in psychological outlook of the patient[10]

While clinical trials using human skin allograft were

* The terms "allograft," "homograft," and "heterograft" are synonyms for grafts transplanted from one individual to another in the same species. In contrast, "autograft" means a graft transplanted from one place to another on the same individual (for example, the usual meaning of "skin graft"), and "xenograft" refers to a graft transplanted from one species to another (for example, pigskin to a human).

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under way, basic research was being performed to elucidate the mechanisms that apparently made biological dressings superior to conventional dressings. Eade noted a significant reduction of the number of bacteria under biological dressings compared with conventional gauze dressings.[11] Wood discovered that phagocytes in the wound used the fibrin matrix established between a biological dressing and the wound to trap bacteria and allowed the bacteria to be phagocytized without antibody production or opsonins.[12] These observations, repeated by others, seem to be well established.[13,14]

In 1966, Morris *et al.* reported that skin allograft promoted the healing of infected ulcers.[15] Shortly thereafter, the same group reported the beneficial effects of skin allograft placed in heavily contaminated wounds as a "physiologic primary closure."[16]

Upon further investigation of the effects of skin allograft on wounds, O'Donaghue and Zarem found that skin allograft stimulates neovascularization of the wound.[17] This stimulation of neovascularization and the actual vascularization of the viable allograft (the "take") make viable allograft the most ideal biological dressing (autograft would not be considered a "dressing").

Working at Fort Sam Houston with wounded from the Vietnam war, Shuck reasoned that the benefits seen in large burn wounds also would be seen if biological dressings of allograft skin were used in nonburn traumatic wounds. His clinical trial bore this out and was reported in 1969[18] and 1972.[19]

Storage of Tissue

The storage of allograft for use at a later time was an essential element to its routine clinical use in wounds. Although Carrel had written about the banking of tissue in 1912[20] and Wentscher experimented with the storage of sheepskin graft as early as 1903,[21] the banking of human tissue had to await the development of reliable refrigeration in the 1930s. The first blood bank was established at Cook County Hospital in 1937, with subsequent creation of other tissue banks.

As indicated above, Webster was the first to report the clinical use of skin grafts refrigerated for significant lengths of time.[3] The maximal length of storage that yielded still viable grafts under these conditions was 21 days. In search of a way to store tissue for longer periods, Strumia and Hodge reported in 1945 the viable autografting of skin that had been frozen.[22] This was almost immediately called into question by Baxter and Entin; in 1948, they discovered that skin was killed by ice crystal formation upon freezing.[23] It is thought that the healing Strumia and Hodge observed with the application of previously frozen skin was the result of the beneficial effects of nonviable biological dressing on wounds that healed secondarily.

Only by a chance observation in 1949 did Polge *et al.* discover a cryopreservative that would make the freezing of tissues in the viable state possible.[24] While trying numerous diluents in which to freeze sperm in the viable state, he was surprised to find that only a saline solution yielded viable sperm when thawed. On closer examination, he found glycerol present in the saline as a preservative. When he subsequently tried solutions of glycerol, he found that this was the cryopreservative agent.

Although cell suspensions were frozen in the viable state soon after this discovery, it was 1964 before Lehr and his colleagues reported freezing rat skin in the viable state after exposure to a glycerol solution, and the subsequent "take" of the autograft when reapplied to the rat.[25] It was not until 1968 that Cochrane reported the first clinical use of skin autografts that had been frozen and thawed prior to being used in the viable state.[26] Only then were the first skin banks for the frozen storage of skin established by Burke for the Burn Unit at the Massachusetts General Hospital and by Trier and Sell for the U.S. Navy at the Bethesda Naval Hospital.[27,28]

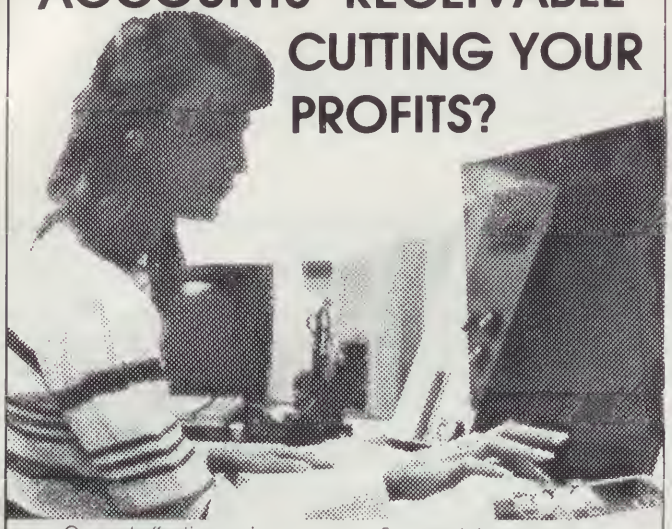
Since then more than 50 skin banks have been established in the United States. Most of these have been developed in association with a burn treatment center to fill the requirement for adequate skin allograft in what has become its routine use in burn therapy.

Future articles in this series will discuss the development of Maryland's skin bank, The Maryland Tissue Bank and Laboratory, and its unique role in supplying allograft skin to nonburn trauma patients at the Shock Trauma Center as well as to burn patients at the Baltimore Regional Burn Center.

References

1. Girdner, J.H. "Skin-grafting with Grafts Taken from the Dead Subject." *Med Record* 20(1881):119–20.
2. Baronio, G. *Degli Innesti Animali.* Milano, 1804.
3. Reverdin, J.L. "Greffe Epidermique." *Bull de la Soc Imperiale de Chir de Paris*, pp. 493–511, 1869.
4. Wolfe, J.R. "A New Method of Performing Plastic Operations." *Br Med J* 2(1875):360.
5. Thiersch, C. "On Skin Grafting." *Verhandl Deutsch Ges Chir* 15(1886):17.
6. Bettman, A.G. "Homogeneous Thiersch Grafting as a Life Saving Measure." *Am J Surg* 39(1938):156.
7. Webster, J.P. "Refrigerated Skin Grafts." *Ann Surg* 120(1944):421.
8. Brown, J.B. *et al.* "Postmortem Homografts as 'Biological Dressings' for Extensive Burns and Denuded Areas." *Ann Surg* 138(1953):618.
9. Artz, C.P. *et al.* "Postmortem Skin Homografts in the Treatment of Extensive Burns." *Arch Surg* 71(1955):682.
10. Zaroff, L.I. *et al.* "Multiple Uses of Viable Cutaneous Homo-

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grafts in the Burned Patient." *Surgery* 59(1966):368.

11. Eade, G.G. "The Relationship Between Granulation Tissue, Bacteria, and Skin Grafts in Burned Patients." *Plast Reconstr Surg* 22(1958):42.

12. Wood, W.B. "Phagocytosis, with Particular Reference to Encapsulated Bacteria." *Bact Rev* 24(1960):41.

13. Burleson, R. and Eiseman, B. "Mechanisms of Antibacterial Effect of Biological Dressings." *Ann Surg* 177(1973):181.

14. Teh, B.T. "Why Do Skin Grafts Fail?" *Plast Reconstr Surg* 63(1979):323.

15. Morris, P.J. *et al.* "The Use of Frequently Changed Skin Allografts to Promote Healing in the Non-healing Infected Ulcer." *Surgery* 66(1966):13–19.

16. Burke, J.F. and Bondoc, C.C. "A Method of Secondary Closure of Heavily Contaminated Wounds Providing Physiologic Primary Closure." *J Trauma* 8(1968):228.

17. O'Donaghue, M.N. and Zarem, H.A. "Stimulation of Neovascularization—Comparative Efficacy of Fresh and Preserved Skin Grafts." *Plast Reconstr Surg* 48(1971):474.

18. Shuck, J.M. *et al.* "Homograft Skin for Wound Coverage." *Arch Surg* 98(1969):472.

19. Shuck, J.M. *et al.* "Homograft Skin for the Early Management of Difficult Wounds." *J Trauma* 12(1972):215.

20. Carrel, A. "The Preservation of Tissues and Its Application of Surgery." *JAMA* 59(1912):523.

21. Wentscher, J. "Ein weiterer Beitrag zur Uberlebensfahigkeit der menschlichen Epidermiszellen." *Deutsche Zeitschr f Chir* 70(1903–04):21.

22. Strumia, M.M. and Hodge, C.C. "Frozen Human Skin Grafts." *Ann Surg* 121(1945):860.

23. Baxter, H. and Entin, M.A. "Experimental and Clinical Studies of Reduced Temperatures in Injury and Repair in Man." *Plast Reconstr Surg* 3(1948):303.

24. Polge, C. *et al.* "Revival of Spermatozoa After Vitrification and Dehydration at Low Temperature." *Nature* 164(1949):666.

25. Lehr, H.B. *et al.* "Permanent Survival of Preserved Skin Autografts." *Surgery* 56(1964):742.

26. Cochrane, T. "The Low Temperature Storage of Skin: A Preliminary Report." *Br J Plast Surg* 21(1968):118.

27. Trier, W.C. and Sell, K.W. "United States Navy Skin Bank." *Plast Reconstr Surg* 41(1968):543.

28. Bondoc, C.C. and Burke, J.F. Clinical Experience with Viable Frozen Human Skin and a Frozen Skin Bank." *Ann Surg* 174(1971):371.

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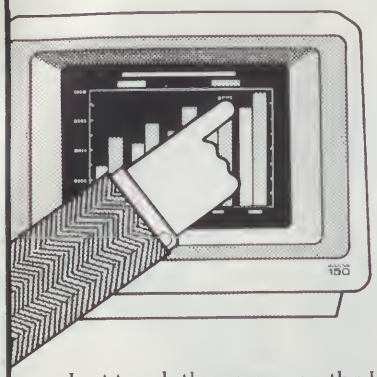
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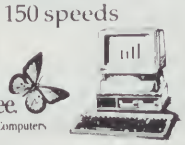
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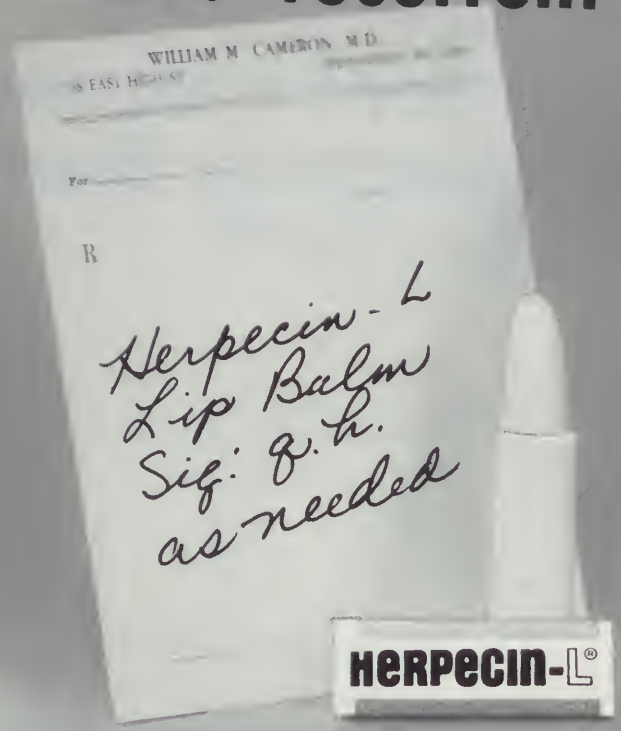
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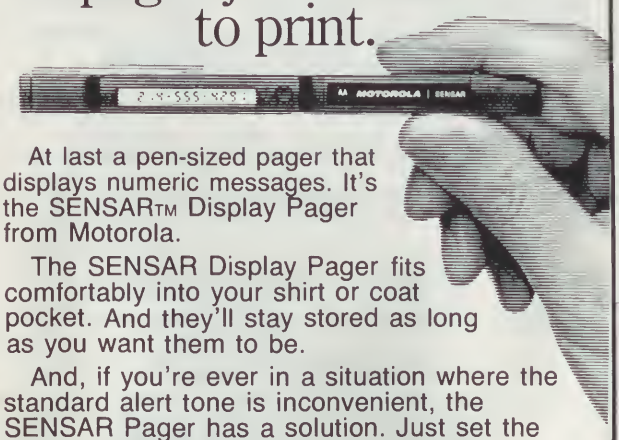
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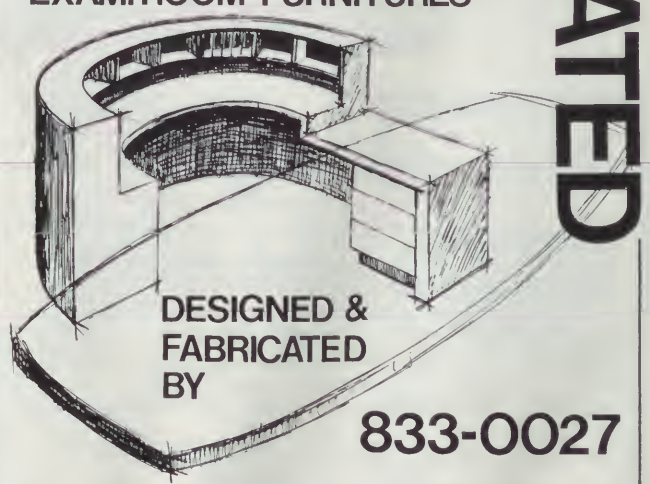
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Board of Medical Examiners
Annual Report FY 1984–1985

During the past year, the Board of Medical Examiners wrestled with two difficult issues. Although foreign medical schools are not a new problem, the complexity of the problem has mushroomed. This year, for the first time, the Board conducted two hearings on the quality of medical education at two foreign medical schools. Next year, the Board will be required to conduct a minimum of four hearings on other schools that are not eligible for approval by the Liaison Committee on Medical Education. Although this problem is intensifying, the Board is in the process of proposing legislation to manage the problem in an accountable and humane manner.

State medical boards are being perceived in a suspicious manner as the result of a notorious medical diploma fraud case. Fear of the incompetent physician is ever present, and the press feeds that fear through numerous investigations of the licensing process. In Maryland, the Board is consistently on the alert for these individuals and maintains an active network with other agencies throughout the United States to prevent fraudulent licensure.

It is not easy. The Board has requested additional personnel and a computer to enable it to maintain its present performance standard. The following report delineates the functions of the Board. The Board cannot be held accountable if lack of resources undermine its current level of competence, and it urges the Department of Health and Mental Hygiene and the Legislature to commit sufficient resources for the Board to continue to function in a responsible manner.

ARTHUR T. KEEFE, Jr., MD
Secretary

Licensing, Certification, Registration, and Identification

The responsibilities of the Board are diverse and complex. The Board of Medical Examiners not only licenses physicians and doctors of osteopathy but also certifies cardiac rescue technicians, aviation trauma technicians, and emergency medical technician-paramedics. The Board registers acupuncturists, physician assistants, psychiatrist assistants, and unlicensed medical practitioners. In the coming year, the Board will identify medical specialists. The Board has been requested by the respiratory care therapists to process regulations to register this medical practice group. An overview of the workload of the Board is revealed in the following statistics.

Licensing The Board of Medical Examiners administers examinations and licenses medical doctors and doctors of osteopathy to practice medicine in Maryland only after an extensive review of credentials. A physician's medical school must verify graduation by submitting a certificate of preliminary education sent directly from the school to the Board. In addition, the applicant must submit a copy of the MD or DO degree. The Board also requires verification from the American Medical Association's master file of all U.S. physicians, verification of examination grades from the appropriate examining board, two physician references, verification of postgraduate training, and verification of licensure status in other states. In addition, foreign medical school graduates are required to obtain certification from the Educational Council for Foreign Medical School Graduates (ECFMG), to obtain translation of the transcript and diploma, and they must have graduated from a foreign medical school approved by the Board.

The Board's licensure and examination workload during the past three years is illustrated on Table 1.

Table 1. Physicians: Number of Applications, Examinations, Licenses, Renewals— FY 1983–1985

	1983	1984	1985
Candidates for licensure by endorsement	996	1,126	1,185
Applicants licensed by endorsement	974	1,116	1,152
Renewal	12,005	10,090	12,458
Applicants for licensure by examination	842	552	456
Candidates taking examination	611	463	398
Applicants licensed by examination	489	314	382
Duplicate licenses issued	43	45	37
Temporary licenses issued	1	2	10
Certification of licensure	452	457	353
Certified copies of grades	22	54	38
Foreign credentials evaluated	759	594	402
Reinstatement	146	80	151
Verification of license	3,510	4,082	4,551
Restricted licenses	31	31	28

Certification: Cardiac Rescue Technicians, Aviation Trauma Technicians, and Emergency Medical Technician-Paramedics Certification of advanced life support providers occurs through the Board of Medical Examiners upon the recommendation of the Maryland Institute for Emergency Medical Services Systems (MIEMSS). These individuals are required to attain a specific level of certified competence through successful completion of a training program that includes formal coursework, practical instruction, and supervised field internship. These providers of emergency health care work under the direction of a physician, both while in training and after certification, as a certified cardiac technician (CRT), aviation trauma technician (ATT), or emergency medical technician-paramedic (EMT-P). In addition to certification, the Board reviews and approves all medical protocols used in the field. The Board also is responsible for the investigation of any protocol errors and reviews disciplinary actions that

may occur at the state and local level. Table 2 illustrates the number of CRTs certified in the past three years. The Board has begun to certify ATTs and EMT-Ps only this year.

Registration: Physician Assistants, Psychiatrist Assistants, and Acupuncturists A physician assistant (PA) is an individual who, after adequate training and having a job description approved by the Board, is registered by the Board to perform certain duties that would otherwise be performed by a physician. Physician assistants must successfully complete the examination for physician assistants given by the national certifying board. The job description to be submitted for approval by a PA when ready to become employed consists of a complete resume of duties to be delegated to the PA by the physician and a description of the supervisory relationship that will exist between the PA and the physician. Basic duties listed on the job description are fourteen standard physician assistants procedures as specified by the National Commission on the Certification of Physician Assistants. Physician assistants are re-registered every two years. Assisting the Board with this program is the Physician Assistants Advisory Committee.

A psychiatrist assistant is supervised by a psychiatrist and has specialty training in psychiatry. He/she may perform duties normally performed by a psychiatrist. The psychiatrist assistant must have a master's degree from an accredited college or university and have completed a Board-approved graduate program in mental health counseling or some other behavioral science that includes 1,000 hours of supervised clinical psychotherapy experience or a baccalaureate degree from an accredited college or university and 4,000 hours of supervised clinical experience. The Psychiatrist Assistant Advisory Committee assists the Board with this program.

Table 3 describes the total number of registrations and job descriptions recorded during the last three fiscal years.

Acupuncturists are registered by the Board and required to perform acupuncture under the general supervision of a physician. Following the successful completion of approved acupuncture training and examinations, the acupuncturist stimulates a certain point or points on or near the surface of the human body by insertion of needles to prevent or modify the perception of pain control, for the treatment of ailments or conditions of the body. Assisting the Board in this process is the Acupuncture Advisory Committee.

Table 4 illustrates the number of acupuncturists registered in the last three fiscal years.

Table 2. Certified CRTs

1983	1984	1985
1,104	1,116	1,245

Table 3. Registrations: Physician Assistants and Psychiatrist Assistants

	1983	1984	1985
Evaluation of job descriptions	150	214	213
Registration	89	83	95
Re-registration	417	50	368
Delinquent registration	—	14	—

Table 4. Acupuncturists Registered

	1983	1984	1985
Temporary registration	55	—	—
Registration		63	41
Re-registration	—	—	104

New Programs

Next year, the Board will implement two new programs, registration of unlicensed medical practitioners and medical specialty designations.

Unlicensed Medical Practitioners For the first time, the Board will be registering unlicensed medical practitioners. These individuals are residents and interns in postgraduate training programs.

Medical Specialty Identification This program will formalize the process by which a physician can become known as a specialist. The regulations have been completed and are now entering the review process. The Board expects to be able to begin identification of physicians as specialists no later than February 1986.

Medical Quality

In addition to the licensing, registration, certification, and identification process, the Board of Medical Examiners is charged by law to assure that the individuals who are licensed, certified, registered, or identified perform in conformance with the laws and regulations governing their particular profession.

For physicians, assurance of medical quality occurs prior to licensure. Falsification or misrepresentation on an application are grounds to deny licensure. If derogatory information surfaces and a physician is up for renewal, the Board may determine not to renew the license. The Board receives and investigates complaints about individuals who allegedly are practicing medicine without a license. Maryland physicians are screened continually by peers and by the community. In addition, as part of the biennial renewal process, physicians are required to complete 100 hours of continuing medical education.

Finally, each month, the Board of Medical Examiners exchanges information with the Federation of State Medical Boards and the American Medical Association on physicians who have been disciplined in other states and in Maryland. Information from other states is cleared through the computer to determine whether physicians, presently licensed or licensed in the past (nonrenewed), are on the "action" lists. If so, the physician's report is forwarded to the Commission on Medical Discipline. The medical quality assurance process operates in the same manner to continually screen the acupuncturists, CRTs, ATTs, EMT-Ps, physician assistants, psychiatrist assistants, and unlicensed medical practitioners. The Board is charged

with the investigation of all complaints regarding these paraprofessionals and refers findings and recommendations to the Commission on Medical Discipline. Table 5 delineates medical quality activity during 1985.

Fiscal Data

Every two years the legislative auditors examine the Board's fiscal records. The latest examination performed in the Spring of 1985 revealed no deficiencies.

Revenues and expenditures of the Board are shown on Table 6.

Planning

The Board annually submits to the Department of Health and Mental Hygiene a statement of planning objectives, a list of unmet needs, and a projection of future needs. These lists include new programs to enhance Board proficiency. Additional personnel and a computer system are considered by the Board to be essential at this time. Revenues of the Board are sufficient to cover the expense of these needs, but since the revenues do not flow directly to the Board, the budget process routinely rejects the Board's requests as evidenced by the discrepancy between revenues and expenditures as shown on Table 6.

Public Accountability

The Board of Medical Examiners is not operating independently. As stated previously, there are many checks in the system to assure confidence.

Internally, the Board's procedures are working well. The Board is aware of the need to update methods in a careful and progressive manner. To maintain standards, the Board constantly monitors statutes, revises regulations, requests administrative support when necessary, and maintains a vital link with centralized sources of information.

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Table 5. Medical Quality Assurance Actions, 1985

Complaints received	42
Complaints closed	18
Complaints pending investigation	24
Formal hearings	3
Informal hearings	12
Cases closed	3
Cases pending	7
Computer printout verifications	72
Requested information	36

Table 6. Revenues and Expenditures of the Board of Medical Examiners

	1983		1984		1985	
Board Revenues						
Examination fees	$140,865		$106,475		$75,060	
Registration fees	185,059		197,725		208,341	
Miscellaneous	25,087		29,011		23,300	
Renewals	614,135		507,409		635,650	
Total Revenues		$965,146		$840,620		$942,351
Board Expenditures						
Salaries/benefits	148,061		179,177		251,968	
Examinations/hearings	74,590		84,995		82,071	
Office expenses	42,728		40,461		52,138	
Travel	4,328		4,144		5,701	
Subtotal	269,707		308,777		391,878	
Other Related Costs						
Indirect costs-Board	NC*		192,071		240,967	
Commission expenditures	200,230		126,583		133,726	
Indirect costs-Commission	NC*		123,759		100,175	
Subtotal	$200,230		$442,413		$474,868	
Total Expenditures		−469,937		−751,190		−866,746
Balance		$495,209		$ 89,430		$ 75,605

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Miscellaneous Meetings

Feb 21–23 1986 Annual Meeting and Scientific Session Virginia Chapter, AAP and The Virginia Pediatric Society, Williamsburg Conference Center, Colonial Williamsburg, VA. CME designation: 12 PREP hours and 15 AMA Cat I hours. Info: 804-643-8130.

March 5, 12, 19 Psychoanalytic Perspectives on Ulcerative Colitis at the Baltimore-DC Psychoanalytic Institute, 821 N. Charles St., Baltimore. First in a series of presentations on Classical Psychosomatic Disorders. 8–9:30 p.m.; 4.5 AMA Cat I credits for program. Mar 5: Review of Important Literature; Mar 12: Implications for Medical Management; Mar 19: Participants opportunity to discuss cases. Info/registration 301-727-1740.

Mar 24–26 Prevention of Venous Thrombosis and Pulmonary Embolism, an NIH Consensus Development Conference, Masur Auditorium, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info: M. Dillon, Prospect Assoc., 2115 E. Jefferson St., Suite 401, Rockville, MD 20852 (301-468-6555).

Apr 25–26 Computer Applications, An Introductory Workshop, College Park, MD, sponsored by the American College of Obstetricians and Gynecologists. Fee: $360 nonfellow. Info: R. Murray 202-638-5577 ext. 343.

May 8–10 Alumni Crab Feast, University of Maryland School of Medicine, 7–10 p.m. Students Common, MSTF. Info: J. Thompson 301-528-7454.

May 10 Alumni Reception and Dinner Dance, at the Sheraton Inner Harbor, University of Maryland School of Medicine. Infor: J. Thompson 301-528-7454.

May 15–18 Virginia Society of Otolaryngology—HNS Annual Meeting, Wintergreen Resort, Wintergreen, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

May 27–31 Fifteenth Annual SCCM Educational and Scientific Symposium, Washington, DC. Fee: Nonmember physicians $375, nurses and therapists $270, member physicians $275, nurses and therapists $225; approx 40 Cat I credits. Info: T. Schultz 714-870-5243.

May 29–Jun 1 The Virginia Society of Ophthalmology Annual Meeting, The Omni International, Norfolk, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

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The Johns Hopkins Medical Institution

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985–86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Jan 17 Macular Diseases: Current Concepts and Practical Management. Fee: $160, $80 (those in training with letter verifying status); 8 AMA Cat I credits. Info: P. Macedonia 301-955-6046.

Feb 20–21 Diagnosis and Treatment of Sex Disorders. Hours of instruction: 16.

Feb 24–25 Applied Ethics: Caring for the Mentally Impaired Elderly. Fee: two days $150; one day $100. Appropriate credits applied for. Info: P. Macedonia 301-955-6085.

Feb 27–Mar 1 Symposium on Dysphagia. Hours of instruction: 17.

Mar 3–5 Obesity and Other Eating Disorders. Hours of instruction: 20.

Mar 6–7 Asbestos. Hours of instruction to be announced.

Mar 10–12 Spectrum of Developmental Disabilities VIII. Issues of Diagnosis, Evaluation, Habilitation, and Research of the Preschool and School Age Child with Developmental Disabilities. Fee: $290; 20 AMA Cat I credits; 20 Cat A credits for Psychologists; 2.0 CEUs.

Mar 13–14 Brain Receptors: Images and Ideas. Hours of instruction: 15.

Mar 14 Ocular Histoplasmosis Syndrome. Columbia, Maryland. Hours of instruction: 8.

Mar 21 Computers in Ophthalmology. Hours of instruction to be announced.

Mar 22–23 Hemodynamic Monitoring/Patient Care and Pulmonary Artery Catheterization. Hours of instruction: 12.5.

Mar 24–26 Critical Care Medicine. Hours of instruction: 24.

Apr 3–4 Diagnosis and Treatment of Neoplastic Disorders. Hours of instruction: 45.

Apr 7–12 Pediatric Trends 1986. Fee: $500; 45 AMA and 45 PREP credits. Info. Course Coordinator 301-955-5880.

Apr 14–15 *In Vitro* Toxicology—Approaches to Validation. Fee: $225 before Mar 1, $275 thereafter; 15 AMA Cat I credits and 1.5 CEU pending. Info: J. Ryan 301-955-6046.

Apr 28–30 Interventional Radiology and DSA. Fee $325 physicians; $175 residents, nurses, technologists; 25 AMA Cat I credits; ECE by ASRT. Info: C Kearney 301-955-3168.

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/86. Info: J. Mosmiller 301-955-8450.

Basic Practicum Mar 10–14, May 19–23, Aug 11–15, Sep 22–26, Nov 17–21. Fee: $460; 40 AMA Cat I credits.

Advanced Obstetrics & Gynecology Feb 26–28, Apr 23–25, Nov 5–7. Fee: $325, 24 AMA Cat I credits.

Visiting Physicians offered weekly throughout the year for experience in the lab and participation in reading sessions. By appointment. Fee: $460; 40 AMA Cat I credits.

Advanced Practicum by Ultrasound Jun 9–13.

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The Johns Hopkins Medical Ground Rounds. Accredited audiovisual subscription program for the practicing physician. 40 AMA Cat I credits/year. Write to the Johns Hopkins University School of Medicine, Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205 (301-955-3988).

Diagnostic Cytopathology for Pathologists, 1986 Postgraduate Institute: February to May 1986, subspecialty residency in Clinical Cytopathology, compressed into 152 AMA Cat I credits in two courses, both of which must be taken:

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Apr 28—May 9—In-residence Course B, concentrated lecture series, laboratory study, and clinical experience at the Johns Hopkins Medical Institutions, Baltimore, MD, USA.

Designed solely for pathologists who are certified (or qualified for certification) by the American Board of Pathology or its international equivalent, this institute is an intensive refresher in all aspects of Clinical Cytopathology with time devoted to newer developments and techniques, special problems, and recent applications including *immunodiagnosis* and *needle aspiration.* Loan slide set with texts (Course A) will be sent each participant within the US and Canada for home study during Feb through Apr before Course B in Baltimore, Apr 28–May 9. Participants *outside* the US and Canada must make arrangements to study Course A before Course B. *The entire course is given in English.*

Application and completed preregistration is advised ASAP: completed preregistration must be done **before March 28, 1986,** unless by special arrangement. Info: John K. Frost MD, 604 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA.

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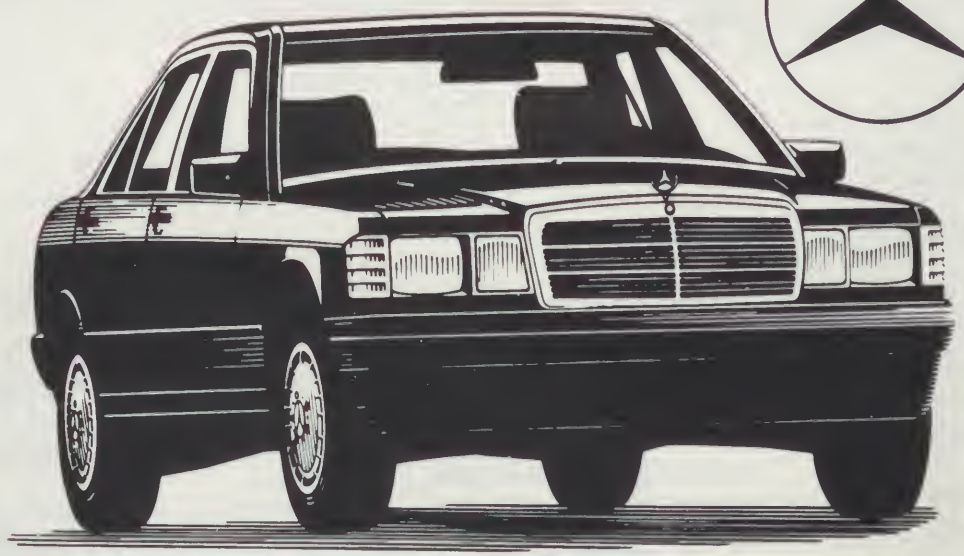
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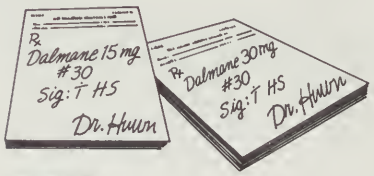
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On the cover: Dr. Cordell was Librarian of Med-Chi 1870–1871 and 1880–1887; President of Med-Chi 1903–1904; and author of *The Medical Annals of Maryland*. This portrait by Louis Paul Dieterich, commissioned by William Oster MD, was presented to the Medical and Chirurgical Faculty at the Annual Meeting, April 25, 1912. It hangs on the north wall of Osler Hall in the Med-Chi Building at 1211 Cathedral Street, Baltimore. Article on Cordell's Diary begins on page 99.

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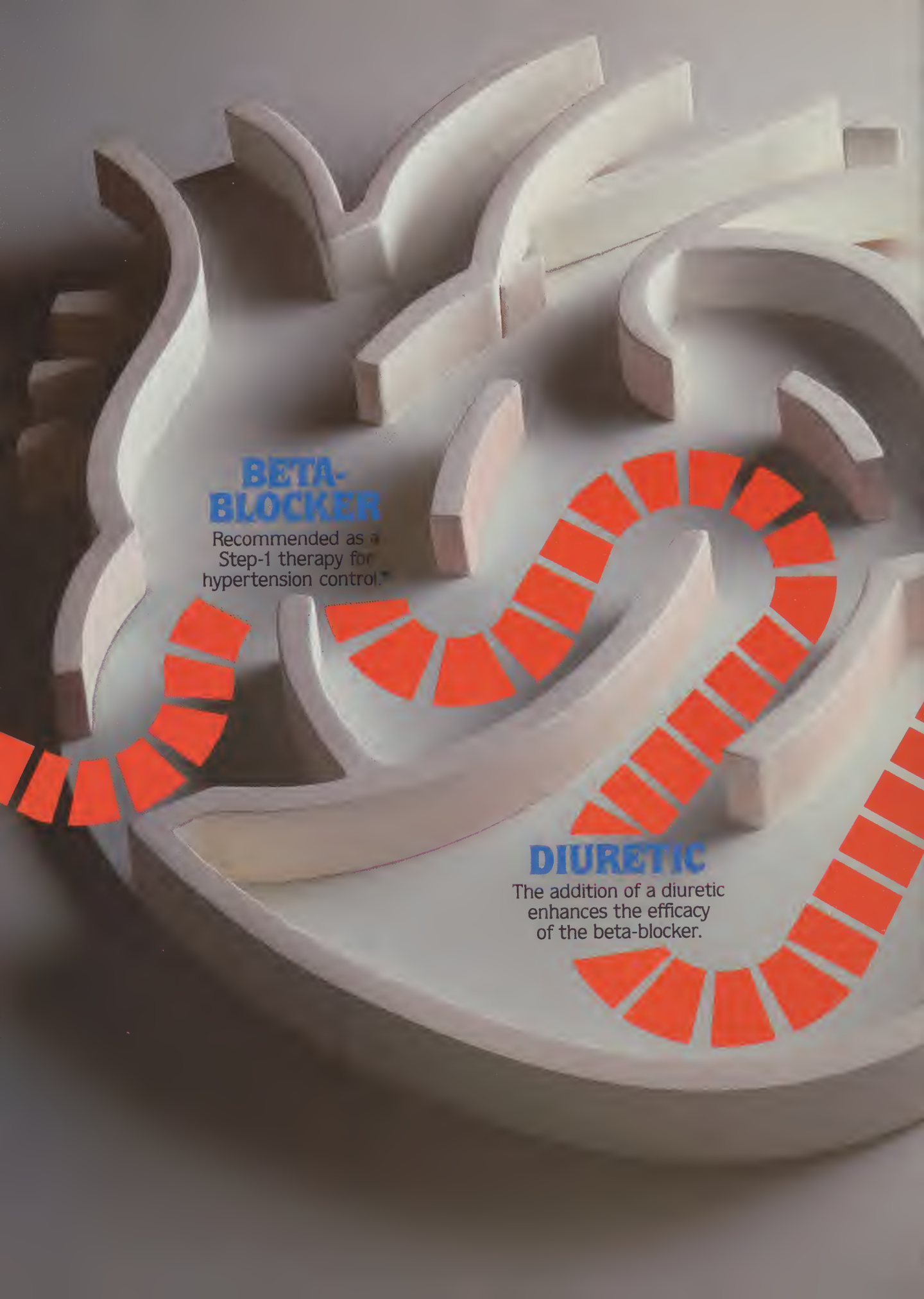
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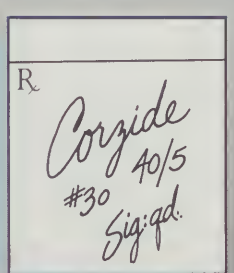
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*Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure. The 1984 report of the Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure. Arch Intern Med 144:1045-1057, 1984.

Please see brief summary of prescribing information on following page

CORZIDE®

(nadolol-bendroflumethiazide tablets)

CORZIDE® 40/5
CORZIDE® 80/5
Nadolol-Bendroflumethiazide Tablets

DESCRIPTION: CORZIDE (Nadolol-Bendroflumethiazide Tablets) for oral administration combines two antihypertensive agents: CORGARD® (nadolol), a nonselective beta-adrenergic blocking agent, and NATURETIN® (bendroflumethiazide), a thiazide diuretic-antihypertensive. Formulations: 40 mg and 80 mg nadolol per tablet combined with 5 mg bendroflumethiazide.

CONTRAINDICATIONS: Nadolol — Bronchial asthma, sinus bradycardia and greater than first degree conduction block, cardiogenic shock, and overt cardiac failure (see WARNINGS). **Bendroflumethiazide** — Anuria, and in those with previous hypersensitivity to bendroflumethiazide or other sulfonamide-derived drugs.

WARNINGS: Nadolol — Cardiac Failure — Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta-blockade may precipitate more severe failure. Although beta-blockers should be avoided in overt congestive heart failure, if necessary, they can be used with caution in patients with a history of failure who are well compensated, usually with digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle. IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta-blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, digitalize and/or give diuretics, and closely observe response, or discontinue nadolol (gradually, if possible).

Exacerbation of Ischemic Heart Disease Following Abrupt Withdrawal — Hypersensitivity to catecholamines has been observed in patients withdrawn from beta-blocker therapy, exacerbation of angina and, in some cases, myocardial infarction have occurred after *abrupt* discontinuation of such therapy. When discontinuing chronic use of nadolol, particularly in patients with ischemic heart disease, gradually reduce dosage over a 1- to 2-week period and carefully monitor the patient. Reinstitute nadolol promptly (at least temporarily) and take other measures appropriate for management of unstable angina if angina markedly worsens or acute coronary insufficiency develops. Warn patients not to interrupt or discontinue therapy without physician's advice. Because coronary artery disease is common and may be unrecognized, it may be prudent not to discontinue nadolol therapy abruptly even in patients treated only for hypertension.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA-BLOCKERS. Administer nadolol with caution since it may block bronchodilation produced by endogenous or exogenous catecholamine stimulation of $beta_2$ receptors. **Major Surgery** — Because beta blockade impairs the ability of the heart to respond to reflex stimuli and may increase the risks of general anesthesia and surgical procedures, resulting in protracted hypotension or low cardiac output, it has generally been suggested that such therapy should be withdrawn several days prior to surgery. Recognition of the increased sensitivity to catecholamines of patients recently withdrawn from beta-blocker therapy, however, has made this recommendation controversial. If possible, withdraw beta-blockers well before surgery takes place. In emergency surgery, inform the anesthesiologist that the patient is on beta-blocker therapy. Use of beta-receptor agonists such as isoproterenol, dopamine, dobutamine, or levarterenol can reverse the effects of nadolol. Difficulty in restarting and maintaining the heart beat has also been reported with beta-adrenergic receptor blocking agents. **Diabetes and Hypoglycemia** — Beta-adrenergic blockade may prevent the appearance of premonitory signs and symptoms (e.g., tachycardia and blood pressure changes) of acute hypoglycemia. This is especially important with labile diabetics. Beta-blockade also reduces release of insulin in response to hyperglycemia; therefore, it may be necessary to adjust dose of antidiabetic drugs. **Thyrotoxicosis** — Beta-adrenergic blockade may mask certain clinical signs (e.g., tachycardia) of hyperthyroidism. To avoid abrupt withdrawal of beta-adrenergic blockade which might precipitate a thyroid storm, carefully manage patients suspected of developing thyrotoxicosis.

Bendroflumethiazide — Use with caution in severe renal disease. In patients with renal disease, azotemia may be precipitated. With impaired renal function, effects of the drug may be cumulative. Use with caution in impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. Possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS: General — Nadolol — Use with caution in patients with impaired hepatic or renal function (see DOSAGE AND ADMINISTRATION).

Bendroflumethiazide — At appropriate intervals, perform serum electrolytes determination to detect possible electrolyte imbalance warning signs of which are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and G.I. disturbances such as nausea and vomiting. Observe patients for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Drugs such as digitalis may influence serum electrolytes. Hypokalemia may develop, especially with brisk diuresis, in presence of severe cirrhosis. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Response of the heart to toxic effects of digitalis can be exaggerated with hypokalemia. Use potassium supplements such as high potassium foods to avoid or treat hypokalemia. Any chloride deficit is generally mild and usually does not require specific therapy except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction rather than salt administration except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain thiazide-treated patients. Latent diabetes mellitus may become manifest during thiazide therapy. Antihypertensive effects of bendroflumethiazide may be enhanced in the postsympathectomy patient.

Careful reappraisal of therapy and consideration given to withholding or stopping diuretic therapy is necessary if rising nonprotein nitrogen or BUN (indicative of progressive renal impairment) occurs. Thiazides may decrease serum PBI levels without signs of thyroid disturbance. Thiazides decrease calcium excretion. Pathologic changes in parathyroid gland with hypercalcemia and hypophosphatemia have been occasionally observed with prolonged therapy. Common complications of hyperparathyroidism have not been seen.

Information for Patients — Warn patients, especially those with evidence of coronary artery insufficiency, against interruption or discontinuation of nadolol without physician's advice. Although cardiac failure rarely occurs in properly selected patients, advise patients being treated with beta-adrenergic blocking agents to consult physician at the first sign or symptom of impending failure. Advise patients of proper course if dose inadvertently missed.

Laboratory Tests — Regularly monitor serum and urine electrolyte levels (see WARNINGS, *Bendroflumethiazide*, and PRECAUTIONS, *General, Bendroflumethiazide).*

Drug Interactions — Nadolol — When administered concurrently the following drugs may interact with beta-adrenergic blocking agents. **Anesthetics, general** — exaggeration of anesthetic-induced hypotension (see WARNINGS, *Nadolol, Major Surgery).* **Antidiabetic drugs (oral agents and insulin)** — hypoglycemia or hyperglycemia, adjust antidiabetic drug dosage accordingly (see WARNINGS, *Nadolol, Diabetes and Hypoglycemia).* **Catecholamine-depleting drugs (e.g., reserpine)** — additive effect, monitor closely for evidence of hypotension and/or excessive bradycardia.

Bendroflumethiazide — When administered concurrently the following drugs may interact with thiazide diuretics. **Alcohol, barbiturates, or narcotics** — may potentiate orthostatic hypotension. **Antidiabetic drugs (oral agents and insulin)** — thiazide-induced hyperglycemia may require adjustment of antidiabetic drug dosage. **Other antihypertensive drugs** — additive or potentiated effect. **Corticosteroids, ACTH** — intensified electrolyte depletion, particularly hypokalemia. **Ganglionic or peripheral adrenergic blocking drugs** — potentiated effect. **Preanesthetic and anesthetic agents** — effects may be potentiated, adjust dosage accordingly. **Pressor amines (e.g., norepinephrine)** — possible decrease response but not sufficient to preclude their use. **Skeletal muscle relaxants, nondepolarizing (e.g., tubocurarine)** — possible increased response.

Drug/Laboratory Test Interactions — Discontinue thiazides before tests for parathyroid function (see PRECAUTIONS, *General, Bendroflumethiazide).*

Carcinogenesis, Mutagenesis, Impairment of Fertility — Nadolol — In 1 to 2 years oral toxicologic studies in mice, rats, and dogs, nadolol did not produce significant toxic effects. In 2-year oral carcinogenic studies in rats and mice, nadolol did not produce neoplastic, preneoplastic, or nonneoplastic pathologic lesions. **Bendroflumethiazide** — Long-term studies in animals have not been performed.

Pregnancy — Teratogenic Effects — Nadolol — Category C. In animal reproduction studies with nadolol, evidence of embryo- and fetotoxicity was found in rabbits, but not in rats or hamsters, at doses 5 to 10 times greater (on a mg/kg basis) than the maximum indicated human dose, no teratogenic potential was seen in any of these species. There are no well-controlled studies in pregnant women, therefore, use nadolol in pregnant women only if potential benefit justifies potential risk to the fetus. **Bendroflumethiazide** — Category C. Animal reproduction studies have not been conducted. This drug's effect on the fetus when administered to a pregnant woman or its effect on reproductive capacity is not known. Bendroflumethiazide should be given to a pregnant woman only if clearly needed. **Nonteratogenic Effects** — Since thiazides cross the placental barrier and appear in cord blood, weigh anticipated benefit of the drug in pregnant women against possible hazards to the fetus; these hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other reactions which have occurred in adults.

Nursing Mothers — Both nadolol and bendroflumethiazide are excreted in human milk. Because of the potential for serious adverse reactions in nursing infants either discontinue nursing or discontinue therapy, taking into account the importance of CORZIDE (Nadolol-Bendroflumethiazide Tablets) to the mother.

Pediatric Use — Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: Nadolol — Most adverse effects have been mild and transient and have rarely required nadolol withdrawal. **Cardiovascular** — Bradycardia with heart rates of less than 60 beats per minute occurs commonly, and heart rates below 40 beats per minute and/or symptomatic bradycardia were seen in about 2 of 100 patients. Symptoms of peripheral vascular insufficiency, usually of the Raynaud type, have occurred in approximately 2 of 100 patients. Cardiac failure, hypotension, and rhythm/conduction disturbances have each occurred in about 1 of 100 patients. Single instances of first degree and third degree heart block have been reported, intensification of AV block is a known effect of beta-blockers (see also CONTRAINDICATIONS, WARNINGS, and PRECAUTIONS). **Central Nervous System** — Dizziness or fatigue reported in approximately 2 of 100 patients; paresthesias, sedation, and change in behavior reported in approximately 6 of 1000 patients. **Respiratory** — Bronchospasm reported in approximately 1 of 1000 patients (see CONTRAINDICATIONS and WARNINGS). **Gastrointestinal** — Nausea, diarrhea, abdominal discomfort, constipation, vomiting, indigestion, anorexia, bloating, and flatulence each reported in 1 to 5 of 1000 patients. **Miscellaneous** — Each of the following reported in 1 to 5 of 1000 patients: rash, pruritus, headache, dry mouth, eyes, or skin, impotence or decreased libido; facial swelling; weight gain, slurred speech, cough, nasal stuffiness, sweating, tinnitus, blurred vision. Although relationship to drug usage is not clear, sleep disturbances have been reported. The oculomucocutaneous syndrome associated with practolol has not been reported with nadolol. The following adverse reactions may also occur. **Central Nervous System** — reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability with slightly clouded sensorium, decreased performance on neuropsychometrics. **Gastrointestinal** — mesenteric arterial thrombosis, ischemic colitis. **Hematologic** — agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura. **Allergic** — fever combined with aching and sore throat, laryngospasm, respiratory distress. **Miscellaneous** — reversible alopecia, Peyronie's disease, erythematous rash, arterial insufficiency.

Bendroflumethiazide — Gastrointestinal System — anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis. **Central Nervous System** — dizziness, vertigo, paresthesia, headache, xanthopsia. **Hematologic** — leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia. **Dermatologic-Hypersensitivity** — purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis). **Cardiovascular** — orthostatic hypotension may occur. **Other** — hyperglycemia, glycosuria, occasional metabolic acidosis in diabetics, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, restlessness. Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

OVERDOSAGE: Nadolol may cause excessive bradycardia, cardiac failure, hypotension, or bronchospasm if overdosed. Overdosage of thiazides may cause lethargy, which may progress to coma within a few hours, with minimal depression of respiration and cardiovascular function and without evidence of serum electrolyte changes or dehydration. Gastrointestinal irritation and hypermotility may occur. Transitory increase in BUN and serum electrolyte changes may occur, especially in patients with renal impairment.

Treatment — Nadolol can be removed from the general circulation by hemodialysis. In determining duration of corrective therapy, take note of the long duration of the effect of nadolol. In addition to gastric lavage, employ the following measures, as appropriate. **Excessive Bradycardia** — Administer atropine (0.25 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously. **Cardiac Failure** — Administer a digitalis glycoside and diuretic. It has been reported that glucagon may also be useful in this situation. **Hypotension** — Administer vasopressors, e.g., epinephrine or levarterenol. (There is evidence that epinephrine may be the drug of choice.) **Bronchospasm** — Administer a $beta_2$-stimulating agent and/or a theophylline derivative. **Stupor or Coma** — Supportive therapy as warranted. **Gastrointestinal Effects** — Symptomatic treatment as needed. **BUN and/or Serum Electrolyte Abnormalities** — Institute supportive measures as required to maintain hydration, electrolyte balance, respiration, and cardiovascular and renal function.

DOSAGE AND ADMINISTRATION: DOSAGE MUST BE INDIVIDUALIZED. Patients with renal failure require adjustment in dosing interval, see package insert for dosage in these patients.

Consult package insert before prescribing CORZIDE (Nadolol-Bendroflumethiazide Tablets).

HOW SUPPLIED: Available as scored tablets containing 40 mg nadolol combined with 5 mg bendroflumethiazide and 80 mg nadolol combined with 5 mg bendroflumethiazide in bottles of 100.

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PREVENTIVE MEDICINE ADMINISTRATION
MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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FEBRUARY 1986

HAEMOPHILUS INFLUENZAE MENINGITIS IN YOUNG CHILDREN - 1984

During 1984, 104 cases of bacterial meningitis due to Haemophilus influenzae were reported among Maryland children less than 5 years old. The annual incidence was 38 cases per 100,000 population 0-4 years old (Table 1). Among cases less than 1 year old, 1 (2%) was less than 3 months old; 11 (22%) were 3-5 months old; 27 (53%) were 6-8 months old; and 12 (24%) were 9-11 months old. Female cases occurred more often than expected from the population's distribution by gender (Table 2), but distribution by race and geographic region did not differ significantly from expected. The case fatality ratio was 6%.

Table 1
AGE SPECIFIC INCIDENCE RATES

Age	No. of Cases	Rate
< 1 year old	51	87
1 year old	28	52
2 years old	18	33
3 years old	3	6
4 years old	4	8
TOTAL	104	38

Table 2
CASES BY GENDER AND RACE (n=99)

	White	Non-White	Total
Male	26	15	41
Female	39	19	58
TOTAL	65	34	99

To assess the level of reporting, reported cases were compared with a hospital discharge listing compiled by the Health Services Cost Review Commission (HSCRC) for acute care hospitals in Maryland. During 1984, 81 Maryland residents 0-4 years old were discharged with a diagnosis of Haemophilus meningitis (ICD-9 code 320.0) to home, to extended care facilities or as dead. Seventy reported cases were matched with HSCRC cases by age, race, gender, zip code, hospital and quarter of discharge. Names were not available from the HSCRC list. The 11 remaining HSCRC cases included: 4 discharged in 1984, but with onset in 1983; 1 duplicate; and 6 unreported. The remaining 34 reported cases included: 5 matched with HSCRC cases under ICD-9 code 320.9; 3 medical examiner's cases; 9 whose discharges would have occurred in 1985; 14 reported by hospitals in the District of Columbia; and 2 unmatched with HSCRC cases. Errors in the information for both reported and HSCRC cases were not accessed, but certainly exist, and may contribute to the unreported or unmatched cases.

A recent study reported that H. influenzae meningitis is under reported by more than 50% nationwide (1). For 1984, the data suggests that less than 10% of H. influenzae meningitis cases in young children in Maryland went unreported. The observed incidence is consistent with the rates reported in population based studies (2).

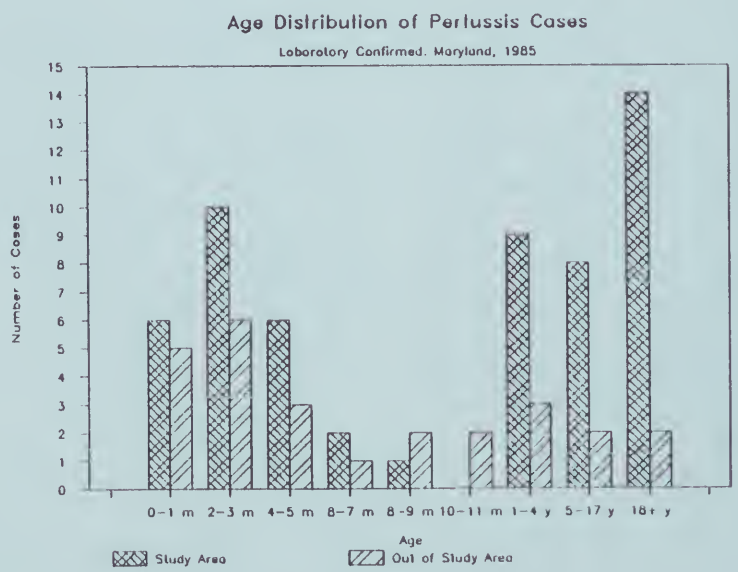
REFERENCES:
1. Schlech WF, Ward JI, Band JD, et al. Bacterial meningitis in the United States, 1978 through 1981. JAMA 1985;253:1749-1754.
2. Fraser DW, Geil CG, Feldman RA, et al. Bacterial meningitis in Bernalillo County, New Mexico. Am J Epidemiol 1974;100:29-34.
Reported by: David H. Trump, M.D., M.P.H., Resident, Johns Hopkins School of Hygiene and Public Health.

PERTUSSIS (PS) STUDY NEWS AND NOTES

I. Data Summary:

As of December 31, a total of 84 laboratory confirmed (by direct FA and for culture) pertussis cases have been reported in Maryland in 1985. Among them, 56 cases were reported from pertussis project area (Baltimore City and Baltimore County), and 28 cases from 10 counties in the out-of-study area, (Anne Arundel, Frederick, Carroll, Dorchester, Prince George's, Montgomery, Charles, Wicomico, Howard and St. Mary's).

The age distribution of the confirmed cases for the project area differs significantly from those in the out-of-study area. Forty-five percent (45%) of the study area cases were less than one year old as compared with 73% in the out-of-study area. Twenty-five percent (25%) of the study area cases were adults, (18 years & older), as compared with 7.7% in the out-of-study area.



II. Pertussis Prophylaxis for Case Contacts Recommended by the Immunization Practices Advisory Committee (ACIP):

Spread of pertussis can be limited by decreasing infectivity of the patient and by protecting close contacts of that patient. To reduce infectivity as quickly as possible, a course of oral erythromycin (children: 40 mg/kg/day; adults: 1 g/day) or trimethoprim/sulfamethoxazole (children: trimethoprim 8 mg/kg/day, sulfamethoxazole 40 mg/kg/day; adults: trimethoprim 320 mg/day, sulfamethoxazole 1,600 mg/day) is recommended for patients with clinical pertussis. The antibiotic should be administered for 14 days to minimize any chance of antibiotic failure. Chemotherapy, however, probably does not affect the duration or severity of disease.

There are two approaches for protecting close contacts (such as children exposed in a household or day care center) of patients with pertussis-active immunization and chemoprophylaxis. Close contacts under 7 years old who have not completed the four-dose primary series of DTP injections or who have not received a dose of DTP within 3 years of exposure should be given a dose of vaccine and should complete a primary series with the minimal intervals. While the usefulness of chemoprophylaxis has not been well demonstrated, it may be prudent to consider a 14-day course of erythromycin or trimethoprim/sulfamethoxazole for close contacts under 1 year old, regardless of immunization status, and for unimmunized close contacts under 7 years old.

Prophylaxis postexposure passive immunization is not recommended. Studies have shown that use of human pertussis immune globulin neither prevents illness nor reduces its severity. This product is no longer available in the United States. (MMWR, July 12, 1985; Vol. 34, No. 27, pp 423).

EPI-ALERT

Influenza Activities:

As of February 3, 1986, a total of 17 isolates of Influenza type B, from Baltimore City, Carroll, Prince George's, Cecil, Talbot and Worcester counties have been confirmed by the Laboratories Administration. These involved an outbreak in a middle school, and another outbreak in the Juvenile Correctional facility in Prince George's county. Others were from school children and young adults.

A total of two nursing homes have reported outbreaks of respiratory illnesses this season.

Outbreak of Gastroenteritis in Nursing Homes:

As of January 22, 1986, a total of 8 outbreaks of gastroenteritis in the nursing homes were reported from Baltimore City and 5 counties. Special laboratory work-up for viral origin can be arranged by contacting Dr. Henry Wasserman or Dr. Feng-Ying C. Lin at 225-6677.

RABID CATS - CARROLL COUNTY

In mid-December, a rural household cat was tested rabies positive. Earlier, the 3-year old neutered male cat had recovered uneventfully from surgery on November 17th for a dangling severed leg (tibia) and missing toes. The trauma was thought to have been a trap wound.

The cat was reported to be disoriented, had a strange voice and had not eaten for 4 days when seen and admitted to the veterinary hospital on December 15th. It was severely dehydrated, uncoordinated with a head tilt, hypersensitive in the lumbar area and had a "vacant look". It would sit head down and, when stimulated, give a cry similar to a tomcat with urethral occlusion. It died that same day. Rabies was suspected and the cat was submitted for testing.

Two veterinarians, a veterinary technician, (all pre-immunized) the cat's 45-year old owner and her 21 year-old son began postexposure rabies treatment.

Comment:

The incubation period for rabies is usually 2 to 8 weeks (often about 1 month) and occasionally as short as 10 days and as long as 6 months or more.

This rabid cat had an onset 24 days (and died 28 days) following severe trauma thought to have been a trap injury. Another rabid cat (Harford County, reported 10/31/85) had undergone repair for fractured metatarsal with circumferential wounds suggestive of a trap wound 34 days prior to onset (36 days prior to death). Subsequently, it was speculated that the injuries may had been made by a rabid animal (i.e., raccoon).

A Baltimore County rabid cat (to be reported in 1986) had an onset about 32 days following repair of fracture of the right calcis (hock in an animal) and overlaying skin of undetermined cause.

It is possible that each of these rear leg injuries may have, in fact, been caused by a rabid animal and resulted in exposure. Unusual leg injuries in cats of undertermined origin may justify a strong suspicion of an exposure to rabies.

From the above incidents, it is therefore evident how important it is for physicians to recognize the role of household pets in the transmission of rabies to humans. Currently the State law requires the vaccination of dogs and cats that are four months of age or older.

Educating the public to avoid wild and strange animals and to vaccinate their pets are especially important during the current rabies epidemic in Maryland.

Another Man's Poison

If you accept that each person is unique—even if that person has a drinking or drug problem—then it's easy to see why a treatment program must be individualized. One man's successful treatment is another man's failure.

At Sheppard Pratt, we don't shoehorn people into a program, sacrificing individualization. Instead we adapt the program to the individual.

There are givens, of course. We're abstinence-oriented, and work according to the principles of Alcoholics Anonymous and Narcotics Anonymous. We provide a warm, home-like environment. We start with a thorough evaluation of the patient, the problem and its effects. Then, using a multidisciplinary team of professionals, we move each patient through individual and group counseling designed to get results as quickly as possible, including outpatient follow-through.

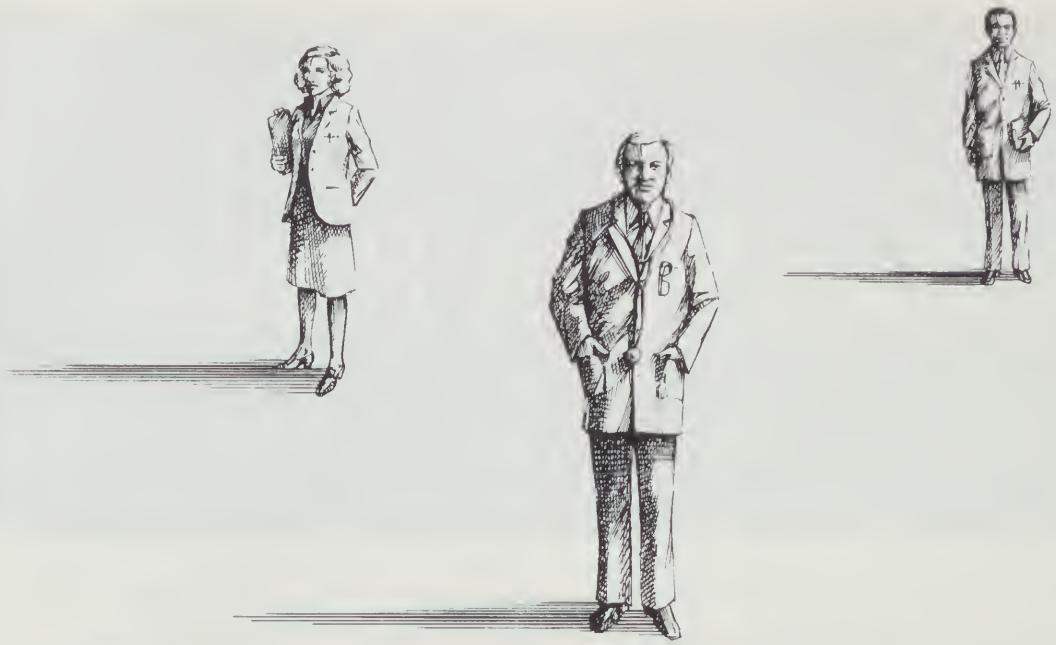
For some, this means intense confrontation. For others, gentle guidance. Our sensitivity, experience and flexibility enable us to determine the best approach.

If you are sometimes in a position to refer alcoholics or drug abusers to suitable treatment centers, learn more about the individualized approach at Sheppard Pratt.

To get general information about the Sheppard Pratt Substance Abuse Program, or to discuss an individual case, contact: Dr. David Waltos, Admissions Officer, Sheppard and Enoch Pratt Hospital, P.O. Box 6815, Baltimore, Maryland 21204. (301) 823-8200.

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Executive Director's Newsletter

February 1986

MALPRACTICE REFORM LEGISLATION

Governor Harry Hughes unveiled the package of bills dealing with malpractice issues and municipality liability at a conference of all interested parties on February 3. He described the work of the two task forces led by Judge James McGill for malpractice insurance problems and Lt. Governor J. Joseph Curran for other liability insurance issues. He urged support for the task forces' proposals.

Latest indications are that Senate Judicial Proceedings Chairman Thomas V. Mike Miller intends to consider the bills as soon as possible. This committee has done substantial work on bills involving the arbitration process and will have definite ideas about the bill proposed by the Governor's Task Force.

Hearings on the House side will be held in the House Judiciary Committee. Chairman Joseph Owens had not indicated a hearing schedule at the time of this writing.

My personal thanks to the large number of members who have taken time to share copies of their letters to legislators. Letters from individual physicians, family members and friends, and from the public will help turn the tide this year. If you need help in locating your legislators, call Diane Sakwa at the Faculty office. A full list of members of the Maryland General Assembly was mailed to all physicians in January.

INSURANCE AVAILABILITY

The professional liability marketplace has diminished drastically. Medical Mutual is currently the only company actively seeking business for all specialties. It's important that you understand the ramifications of moving from one claims-made carrier to another. Since Medical Mutual is not offering prior acts (or retroactive coverage), it is important that the Optional Extension Period Endorsement (or "tail" coverage) be purchased to avoid a gap. We recommend you thoroughly discuss the transfer of coverage with your current broker or call Bill Flynn at the Med-Chi Agency, 301-539-6642.

RESOLUTIONS DEADLINE

The deadline date for submission of resolutions for consideration at the 1986 annual session of the House of Delegates is FRIDAY, FEBRUARY 21, 1986. At this writing, no resolutions have been received. Resolutions must be sponsored by a member or component society of the Faculty, the Council, or committees of the Faculty. A resolution introduced by an individual member must have the endorsement of either one-third of the membership of his component soicety or 30 members of his component society, whichever is smaller.

NEW BUILDING CONSTRUCTION

Renovation of the School #49 building for expanded Faculty offices is scheduled for completion in approximately May 1986. The additional space will permit expanded library functions, increased services for members, and development of an aggressive non-dues income program to enhance revenue.

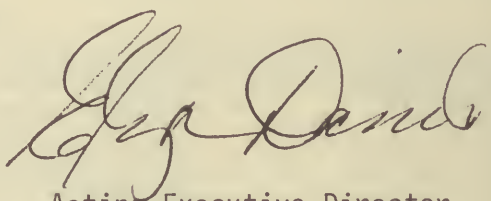
Rooms in the new building will be named for major contributors. If you are interested in having a room named for you, please call the Faculty office for additional information.

A fund-raising campaign has been conducted throughout the construction process. Although contributions received represent an outstanding effort by auxilians and some of our members, there is a shortfall in excess of $700,000 to complete the renovation. The Council, at its meeting on January 30, 1986 voted to recommend to the House of Delegates a one-time assessment of $100 per physician member to assist in meeting this obligation.

MEDICARE FREEZE

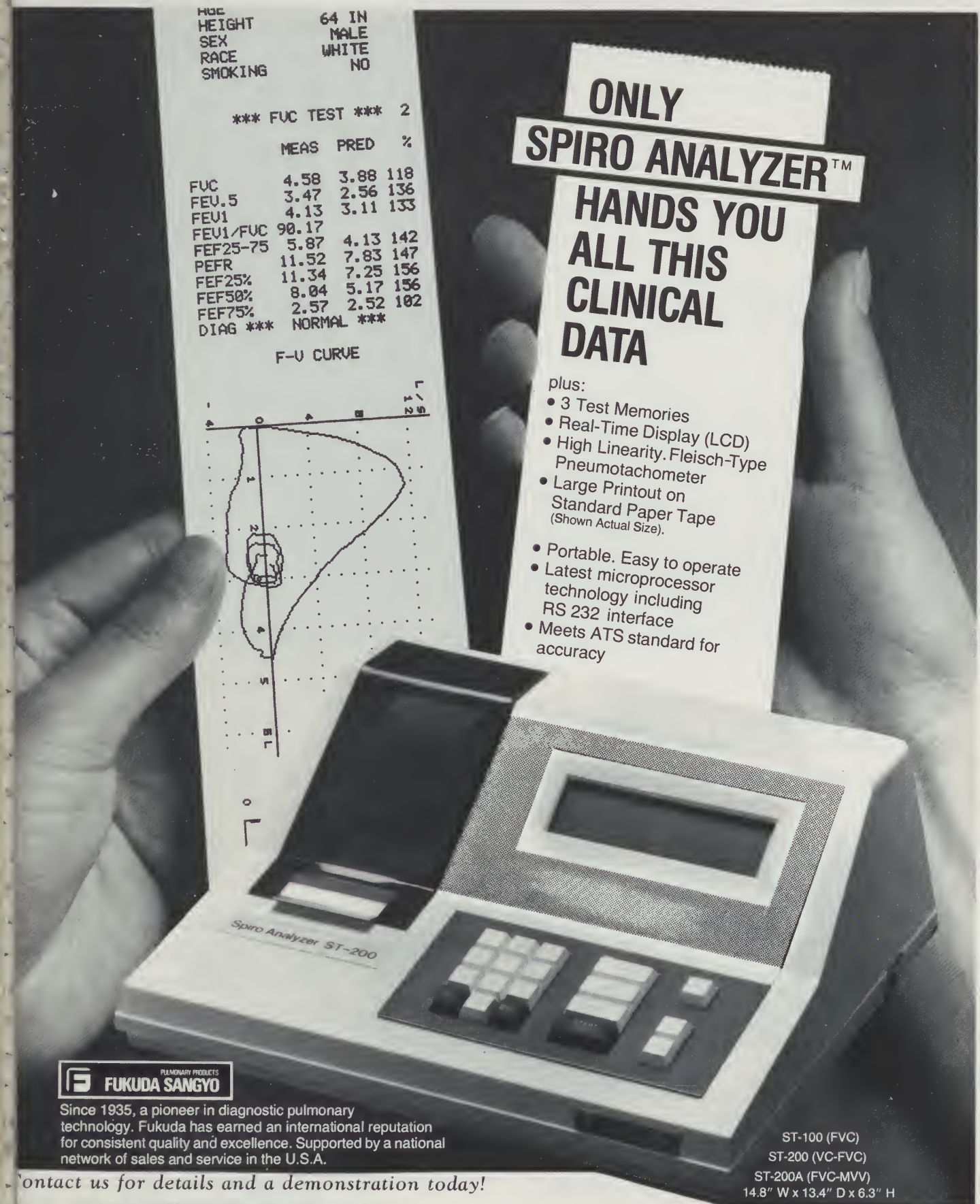
The protracted Medicare freezes on reimbursement and fees for nonparticipating physicians will continue through March 14. Under Deficit Reduction Act provisions, participating physicians were slated to receive an upward adjustment in their fees last October 1. An announced increase of 4.15% (3.15% based on the Medicare Economic Index plus 1% as an inflation factor) tentatively agreed on, effective next month for second-year participating physicians, must be delayed because House-Senate conferees could not complete budget reconciliation before adjournment. Actual increase is expected to be 3.15% since it is anticipated the 1% budget factor will be trimmed to make Medicare budget cuts that, by law, cannot exceed 1%.

Former participants who cancelled agreements must revert to fees they charged during the April-June 30, 1984 base period for the original fee freeze. Conferees indicated their intent of extending the fee freeze on nonparticipating physicians through November 30. The freeze has placed growing financial strains on physicians with high Medicare patient loads. Although the Administration has imposed this hardship on one segment of the economy, it will seek to extend the Medicare reimbursement freeze through FY 1987. AMA unequivocally opposes any continuation of the unfair and discriminatory fee and reimbursement freezes.

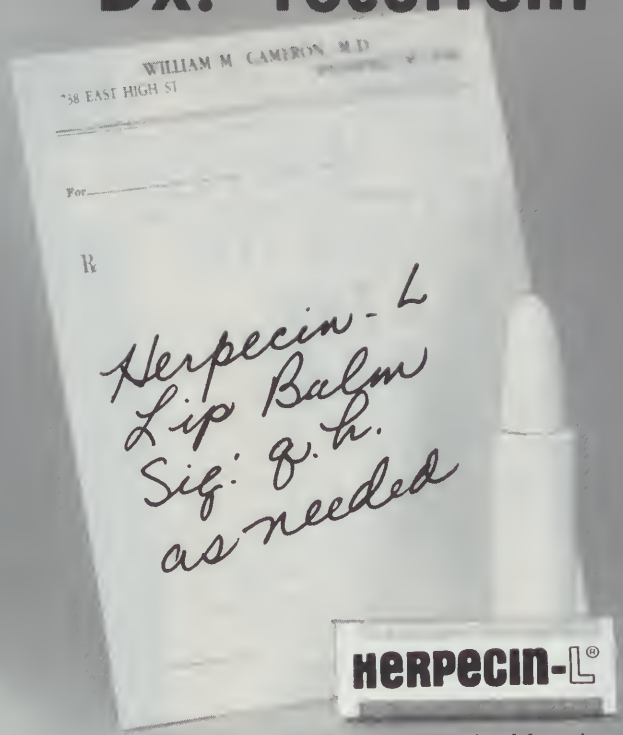


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Maryland Oncology Newsletter

Follow-up of Colorectal Cancer Patients

After surgery, the follow-up schedule depends on the prognosis of the particular patient and on the practice setting. Rationale of follow-up is based on (1) risk of recurrence, (2) where recurrence most likely will be found, (3) what can be done about recurrence, (4) possibility patient can be cured, and (5) whether palliation of symptoms from recurrence is worthwhile.

History and Physical Examination The history should emphasize evidence of weight loss, decreased energy levels, and change in bowel habits. Urinary tract symptoms such as painful urination, changing frequency, or overflow dripping require urinalysis, blood urea nitrogen (BUN), serum creatinine, intravenous pyelogram (IVP), and urologic consultation for cystoscopy and possible retrograde urogram. CT scan of the abdomen may be indicated to define retroperitoneal or pelvic tumor recurrence. The physical examination should focus on the same areas of likely distant spread as did the preoperative physical examination. This includes examination of the supraclavicular lymph nodes (and groins and axillae); the abdomen for masses or organomegaly (mainly liver); pelvic, rectal, or colostomy for a shelf or a mass. This is to be performed every three months for three years, then every six months.

Stool for Occult Blood This often provides the most sensitive test of early ultraluminal tumor recurrence. It is performed during four days of a meat-free diet that includes high vegetable and fruit content to add bulk. After day one of such a diet and for the three succeeding days, the patient prepares for testing. This is to be performed every six months for three years, then once yearly.

Laboratory Tests Complete blood count, blood chemistries including liver function tests (serum calcium, phosphorus, total protein, albumins, SGOT, SGPT, alkaline phosphatase, bilirubin, BUN, creatinine, and uric acid), and plasma CEA should be obtained every three months for three years, then every six months. Falling hematocrit suggests bleeding into the gastrointestinal tract, which could be due to local recurrence, metastic lesions into the GI tract, or other cause such as peptic ulcer or diverticulosis. Alkaline phosphatase and CEA are the most sensitive tests. Their rise may signify liver metastases and that a liver scan is necessary. We prefer CT scan of liver over nucleotide scanning. Elevated CEA also may indicate recurrence or metastases to any other organ such as peritoneum, retroperitoneal space, or lungs. Therefore, CT scan of the abdomen is indicated. In addition, elevated CEA may signify the development of another primary cancer.

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301 528-5224).

Chest X-ray Should be performed every six months for three years, then annually.

Barium Enema and Proctosigmoidoscopy or Colonoscopy Three months after curative surgery, barium enema plus proctosigmoidoscopy (for accurate visualization of the lower 10 cm), or colonoscopy should be performed to provide a new base line for the appearance of the colon. This will facilitate later detection of suture line or local recurrences not to be confused with operative distortion.

Colonoscopy is preferred as it allows actual visualization of the lesion(s) and biopsy. Endoscopy also will allow snaring of any polyps for histological confirmation. In two studies,[1,2] the superiority of colonoscopy over barium enema follow-up was well established. In the first study, follow-up endoscopy detected 17 percent pathology that was missed on barium enema. In the same study, follow-up colonoscopy ruled out 20 percent of questionable pathology on barium enema.

These examinations should then be repeated nine months later, that is, one year after surgery, then once a year for five years, then every other year.

Surgery plays a major role in resecting early local recurrences and metastases that are amenable to surgical extirpation such as metastases to liver and lung. However, it should be kept in mind that when metastases are suspected or confirmed, the patient must undergo complete work up, as shown above, including colonoscopy to ensure that no other primary sites or metastases are overlooked.

For further information, please call or write the Surgical Oncology Program (Dr. Elias, 528-5221) or Division of Gastroenterology (Dr. Nasrallah, 528-5780) at the University of Maryland Medical Systems, Baltimore, MD 21201.

Tumor Conference is held weekly on Fridays 8–9 a.m. in Room N13E28. This is an open meeting, and any physician is welcome. Physicians can present cases, but please call before Friday to obtain time on the schedule for your case and bring pathological slides with you.

E. GEORGE ELIAS **MD**
SALAH M. NASRALLAH **MD**
University of Maryland Hospital
Surgical Oncology Program
Baltimore, MD 21201

References

1. Unger, S.W. and Wanebo, H.J. "Colonoscopy: An Essential Monitoring Technique after Resection of Colorectal Cancer." *Am J Surg* 145:(1983)71–76.

2. Buhler, H., Seefeld, U., Deyhle, P. *et al.* "Endoscopic Follow-up after Colorectal Cancer Surgery. Early Detection of Local Recurrence?" *Cancer* 54(1984):791–93.

One Minute with Diabetes

Doctor, I am 33 years old and have had diabetes for 18 years. For the past three years, I have been working as a travel director for an international travel agency. I love my work. I take travel groups all over the world. The trips last two to three weeks and I am constantly changing time zones, often as much as 6 to 12 hours per 24 hours.

My diabetes is very difficult to control. I find myself taking regular insulin about every six hours. Although I have been advised to take Lente insulin twice daily, I have so many reactions that require drinking regular cola drinks several times a day that I feel I cannot safely take the Lente insulin.

About two months ago, I had a retinal hemorrhage and had to miss a trip. I am afraid I will lose my job if it happens again. I am afraid I will lose my vision.

What can I do to improve the regulation of my diabetes? I test for urine glucose when I have the time. My doctor recommended "self blood glucose monitoring," but I have not been home long enough at a time to purchase the equipment and be instructed in its use. I am scared and need advice.

It is possible to instruct the diabetic patient for an occasional trip through multiple time zones so there will be little or no loss of degree of blood glucose control. However, it is virtually impossible for this diabetic tour director to continue her present work without serious risk of severe diabetic complications and diminished longevity.

She has been under the medical supervision of her present physician for several years. From the onset, he recommended self blood glucose monitoring, yet she has not found the time to obtain the equipment and to learn to use it. Her physician has recommended that she requests a transfer to the home office of the travel agency where her working hours and meal schedule would be regular. She is endangering her life by insisting that she will continue to travel to far-off places.

If diabetic patients must travel through multiple time zones, they should carry insulin, syringes, and testing material in hand luggage. Insulin need not be refrigerated for normal periods of travel. However, it should be protected from freezing or extremes of heat. It is helpful to have a physician's note identifying the traveler as a diabetic requiring syringes for insulin injection (so customs inspectors do not detain the patient as a possible drug addict).

Self blood glucose monitoring is essential for all insulin-dependent diabetics if they hope to maintain adequate blood glucose levels.

For diabetics who do "shift work" (police, fire, and nursing personnel), it is easier to maintain control if shifts are of longer durations: weeks at a time rather than four days on and four days off. It may take several days to get back to adequate control after a change of shift.

Diabetic patients looking for work should consider positions with regular hours and food schedules even if the salary is less. They will make up the monetary difference with more years of employment.

Because it is difficult to obtain insurance for the individual diabetic, he/she should always look for a job providing group health and life insurance coverage. A diabetic patient will do best when employed in a position that permits proper management of his/her condition.

DeWITT E. DeLAWTER MD
Editor

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February	*Philip Dales III, Esq.*	*301-263-6488*
	Curtis Marshall, MD	*301-825-5600*
March	*William Engelman, Esq.*	*301-539-6967*
	Edwin Fulton, MD	*301-768-5050*

Members in the News

Paul Bormel MD, a member of the St. Agnes Hospital Medical Staff, was elected Governor-at-Large of the American College of Surgeons at the College's annual meeting. As Governor-at-Large, Dr. Bormel will represent Maryland in national matters affecting the College and act as a liaison between the Board of Regents, the governing body, and the Fellows of the American College of Surgeons.

Dr. Bormel is a member of the Board of Directors, as well as treasurer of the Baltimore City Medical Society. He received his medical degree from the University of Maryland School of Medicine.

• • •

Spencer Foreman MD, President of Sinai Hospital of Baltimore, has become chairman-elect of the Council of Teaching Hospitals (COTH), a part of the Association of American Medical Colleges based in Washington, DC.

Along with the chairman, Dr. Foreman will represent the interests of teaching hospitals nationally and will provide testimony before Congress and other forums on educational and financial problems of teaching hospitals.

In addition to his duties as chairman-elect, Dr. Foreman holds concurrent positions on several committees and projects of the Association of American Medical Colleges and serves as an AAMC representative on the accreditation council for graduate medical education.

Dr. Foreman has been chief executive officer of Sinai Hospital since 1973.

• • •

Maryland Governor Harry Hughes accepted the Warren Williams Award of the Assembly of the American Psychiatric Association, from Roger Peele MD, Speaker; Chester Schmidt, MD, Area III Representative; and **John Urbaitis** MD, Maryland Psychiatric Society Representative; at the State House in Annapolis in November. The award was for the "Maryland Plan," a joint program sponsored by two Maryland state agencies (the state's Mental Hygiene Administration, **Henry Harbin** MD, Director, and the Department of Psychiatry, University of Maryland School of Medicine, Walter Weintraub MD, Training Director), a unique program of state-university collaboration that has resulted in over 150 university trained psychiatrists joining the public system in the past seven years. The Williams Award is conferred to outstanding, recent, or current activity in the field of psychiatry and mental health.

Baltimore City Medical Society

Numbers of applicants for membership continue to increase each month. Noteworthy at our November meeting were two fathers, Doctors Lippman and Macht, who sponsored their sons for membership.

Howard W. Jones, Jr., MD, professor of Obstetrics and Gynecology at Eastern Virginia Medical School in Norfolk, spoke on "Practical and Ethical Aspects of Assisted Reproduction."

The natural method of reproduction is "woefully inefficient," he said, and many couples are unable to have children. Assisted reproduction is one way of overcoming many causes of natural infertility. Dr. Jones elaborated on several procedural steps required, such as increasing the production of ova, successful "harvesting" of ova, fertilizing procedures, adjunctive freezing, and restoration. He reported, incidentally, that birth defects were no more than controls when Assisted Reproduction was used.

Dr. Jones found many ethical dilemmas along the way. Multiple births do occur. How many are desirable? What should be done with four, six, or ten? Is the ova a human being? It is, potentially, as a pre-embryo. What size embryo can carry a soul? Discussions with many moral theologians found no agreement as to the status of conjugal gametes in the initiation of a life. What is the status of the conceptus when fertilization fails?

CONRAD ACTON MD

Auxiliary

A Challenge: Child Abuse

The Auxiliary's Role

At the September 1985 Med-Chi meeting in Bermuda, J. Donald Drinkard MD, President, challenged the Auxiliary to get involved in this worthwhile cause.

Washington County Auxiliary has developed a model in this area. Working with Family Services of Washington County through Parents Anonymous, the Washington County Auxiliary has been involved in establishing an ongoing community program dedicated to aiding families in distress. The Auxiliary, under the leadership of Bobbie Niklewski, Eva Edmonds, Lois Bell Gist, and Charlene Carpentieri, has organized fund raisers to initiate and continue this project. The Auxiliary also has an ongoing clothes bank for children and parents. Even furniture has been donated.

Auxiliary members donate their time for quality child care (such as coloring and reading) while parents attend group therapy sessions one evening a week at the Presbyterian Church in Hagerstown. At Christmastime, gifts and decorations are given to the children and their families. Auxiliary members attend Board Meetings of Parents Anonymous. They are currently working on a brochure to be distributed to participants. Included in this booklet will be two contributions, "Trust Vs. Mistrust" by Hermi Brewer and "Discipline from Infancy to Two Years" by Dr. Albert Strauss. All participants also receive the monthly magazine, *Growing Child.*

To witness success where there has been failure has been a rewarding experience for the auxilians. Our Washington County Auxiliary won state recognition for their outstanding community service project at the April Annual Meeting. A donation was given to Mrs. Carin Venditta, a coordinator for Parents Anonymous. This money will be used to pay for a videotape to be produced by Antietam Cable TV.

The Washington County Auxiliary serves as a model to all Maryland. It is clear that local involvement can make a difference.

The Governor's Task Force on Child Abuse

The Governor's Task Force on Child Abuse chaired by Charles Shubin MD, a Baltimore pediatrician, made certain recommendations resulting in proposed legislation for the 1986 Session. Bills that failed during the 1985 legislative session were revised for re-introduction in the 1986 General Assembly.

The first of these, a bill that would impose a penalty on certain professionals who failed to report suspected abuse, was redrafted so that professionals who have an obligation to report would suffer professional sanctions by the regulating departments in addition to paying a civil fine for failure to report. Furthermore, professionals who have not had contact with a child but have any reason to believe the child is being abused, must report the suspected abuse.

The bill requiring criminal background checks on persons working with children was modified for reintroduction and now includes volunteer workers.

New legislation was drafted to include a joint resolution asking that the State Department of Education institute a curriculum for children in the area of child abuse prevention and reporting.

A bill enabling a child witness to testify in any proceeding without prior qualification was written with the aid and advice of members of the State's attorneys offices in Maryland. Many children are not allowed to testify because they are too young to understand the language concerning the nature of an oath or cannot be qualified for other reasons. However, these children are able to tell a court about the incident that caused their appearance in court. In addition, this bill would bring Maryland in line with federal standards, which permit children to testify without qualification.

The pornography bill signed into law in 1985 was clarified by striking the necessity of "obscenity" as a criterion for judging child pornography. This bill states that the issue of obscenity is not relevant in child pornography. Without this bill, Maryland would become a haven for child pornography.

The Task Force urges the creation of the Child Abuse and Neglect Council within the Office for Children and Youth. The Council would advise the Governor and respective agencies that deal with children concerning implementation of current laws, monitor those who are involved with children, and recommend future legislative and nonlegislative changes.

How Can Med-Chi Help the Governor's Task Force on Child Abuse?

"How Can Med-Chi help Dr. Shubin's Task Force?" was the main focus of an Ad Hoc Committee meeting held at Med-Chi on August 1, 1985. Those in attendance included Drs. J. Donald Drinkard, Charles Shubin, John Krager, and Joyce Harper. Discussion centered on various ways to educate and inform practicing physicians, parents, families, and teachers on the overwhelming problem of child abuse. Several suggestions for physicians were made: establish a speakers' bureau; contact the school system in your jurisdiction and offer, in a nonthreatening way, to help; maintain good public relations by speaking to PTA groups; try to work on a one-to-one basis with teachers; and express the deep concern for this problem on behalf of your entire medical society.

Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland. Mrs. Kathleen S. Karpers, President; Mrs. Helen M. Reichel, Editor.

Insurance Monitor

Model Legislation

The American Medical Association has drafted model federal legislation that includes incentives for states to enact medical malpractice reforms. Called the National Professional Liability Reform Act of 1985, the model legislation calls for states to be given grants of $250,000 if they enact key reforms:

- Placing a cap of $250,000 on damages for "non-economic" losses, including punitive damages and pain and suffering.
- Allowing awards over $100,000 to be paid in installments over a period of time.
- Restricting contingency fees of attorneys.
- Reducing awards by an amount equal to what the plaintiff is paid from health insurance, disability programs, or other sources.
- Requiring mechanisms by which physicians police each other.
- Requiring physicians to participate in risk management programs offered by hospitals and insurance companies.

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Professional Liability Premiums and Physician Fees

According to a study by the Medical Society of the State of New York, the average physician in New York state spends approximately 10.2 percent of his/her gross revenue, or total fee income, on professional liability insurance. For high-risk specialists across the state, the figures were higher: professional liability insurance premiums were found to be 13.9 percent of surgeons' fees and 23.5 percent of fees for obstetrician/gynecologists. In New York City, liability insurance premiums for OB/GYNs averaged 27.8 percent of their gross revenues.

The study, which included ten states, found that professional liability premiums were 4.7 percent of physicians' fees in New Jersey, 6 percent in Connecticut, 7.4 percent in Chicago, and 4.7 percent in Los Angeles. Premiums for OB/GYNs in Florida averaged 20.9 percent of their gross revenue, while premiums for OB/GYNs in Texas were 4.8 percent of gross revenue.

The study made no attempt to measure indirect costs of medical professional liability, including costs of tests and procedures done for "defensive medicine" purposes. Defensive medicine practices add an estimated $2 billion to the annual cost of medical care in New York.

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Tort Reform Effects

The Institute for Civil Justice studied 6,000 medical malpractice claims filed during the mid-1970s and found that settlements were 25 percent lower and trial awards were 30 percent lower when states enacted caps on awards or permitted awards to be paid in installments. Where rules required that payments received by the claimant from other sources, such as health insurance or disability programs, be deducted, trial awards were reduced up to 50 percent.

• • •

Suits and Awards Show Increase

According to figures reported by the American Medical Association, one physician in twelve was named in a malpractice claim in 1979. Today, one in five physicians can expect to be named in a suit. In 1975, the average award was $48,500; in 1984, it was $338,463.

• • •

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HBP Commentary

Five-Hour Blood Pressure Check to Assess Hypertension Not Responding to Conventional Therapy

L. RANDOL BARKER MD

Occasionally it is difficult to determine at routine office visits whether a poorly controlled hypertensive patient is *noncompliant* (failing to take medication), *dyscompliant* (taking medications faithfully but incorrectly), or *nonresponsive* (taking medications correctly but having an inadequate hypotensive response). Three- to five-hour office visits to assess medication under supervised conditions may be substituted for hospitalization to find an effective antihypertensive regimen. Data on a group of illustrative patients assessed with 5-hour blood pressure (BP) checks at a large hospital-based ambulatory practice show that this cost-saving procedure can be used in any ambulatory care setting.

Dr. Barker is Associate Professor of Medicine, Johns Hopkins University, School of Medicine, Francis Scott Key Medical Center, 4940 Eastern Avenue, Baltimore, MD 21224.

It is sometimes difficult to determine at routine office visits why a hypertensive patient is poorly controlled. Poorly controlled patients who state that they are compliant may make frequent office visits; despite their antihypertensive medications being modified, their BPs remain uncontrolled. If they continue to be "nonresponders" and have especially high blood pressures, they may be hospitalized to find effective antihypertensive regimens. This is expensive in terms of income lost from not working, social costs, and hospital expenses; the latter may come under increasing scrutiny by peer review groups.

During the past few years, we have substituted for hospital admission a five-hour office visit at which the patient receives prescribed medication under supervision and then has his/her BP monitored hourly. This cost-saving procedure is useful and safe in managing apparent nonresponders even with very high BPs. The procedure also is useful for evaluating patients who describe marked but transient side effects during the first one to three hours after taking medications.

The Problem Hypertensive Patient

While the usual hypertensive patient who responds to stepped care may have BP uncontrolled at some office visits, control can be restored easily with simple measures. We define the *problem* hypertensive patient as having severe high BP (diastolic ≥115 mm Hg) at baseline and not attaining sustained BP control even with a variety of drugs.

BP control is not achieved or is unsustained because of both common and uncommon causes. Common causes are noncompliance, increased salt consumption, and psychologic stress. Uncommon causes may include concurrent medications (Table 1), tolerance to drug(s), drug-refractory hypertension, and renovascular and other correctable forms of hypertension.

Table 1. Concurrent Medications Which May Attenuate Response to Antihypertensive Drugs

Promote positive sodium balance
Nonsteroidal anti-inflammatory drugs
Corticosteroids
Estrogens/oral contraceptives
Sodium-containing antacids
Stimulate sympathomimetic activity
Decongestants
Amphetamines
Bronchodilators
Mechanism not established
Tricyclic antidepressants
Phenothiazines
Monoamine oxidase inhibitors

Rationale for Office Assessment

How should the problem hypertensive be assessed? In the hospital, in the home, or in the office? Our rationale for office observation is based on the following:

- the principal response to most drugs occurs within one to four hours (Table 2)

Table 2. Oral Antihypertensive Agents with Prompt Onset of Action following Initial Dose

Drugs	Onset/Duration of Principal Action (Hours)
Beta blockers	2–4*/24–48
Captopril	1–3/8–12
Clonidine	1–2/12–24
Hydralazine	1–4/12–24
Methyldopa	4–6/24–48
Minoxidil	1–3/24–48
Nifedipine	1–3/8–12
Verapamil	1–3/8–12

* Cardioinhibitory action (principal antihypertensive effect may be delayed 1 to 7 days).
NOTE: The catecholamine depleters (reserpine and guanethidine) and all diuretic agents require at least several days to have their principal impact on BP.

HBP Commentary is contributed by the Maryland High Blood Pressure Commission, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

- office observation eliminates the effect of hospitalization on blood pressure
- office observation reveals responses that can be expected to be seen at future office visits

In addition, for the initial dose of some drugs (captopril, nifedipine, and prazosin) 1 to 2 hours' observation is prudent to identify the severe hypotension that may occur following the first dose of these agents.

Method and Case Examples

Our method for office observation includes careful instruction of the patient, measurement of baseline BP, giving the usual dose of medication under supervision, and measuring the BP every 1 to 2 hours for ≤5 hours.

We illustrate the usefulness of 5-hour BP checks with before-and-after data on a group of patients at a large hospital-based ambulatory practice.

Case 1 Five-hour BP check to confirm response to usual regimen As summarized below, a 49-year-old black male sanitation worker had at baseline a BP of 390/160 mm Hg and renal insufficiency (creatinine 2.5 mg/dl). He was asymptomatic and was unable to tolerate multiple drugs because of unacceptable side effects. BP control did not improve despite counseling and extensive modification of drugs and dosages. A regimen of four drugs was tried, and the patient was followed from 8/30/82 to 12/6/82 with inadequate BP control. On 12/8/82, we scheduled a five-hour BP check.

After BP was measured at 9 AM, the usual dose of medications was given; readings at 10 AM, noon, and 2 PM showed continued fall in both sitting and standing BPs, which were close to a satisfactory range at the end of five hours.

The effectiveness of the medication was demonstrated vividly to the patient and was associated with satisfactory BP control over the next month and, in fact, over the ensuing 3 years. The tentative conclusion is that this patient was not taking his admittedly complex regimen systematically and that the 5-hour BP check reinforced medication compliance.

Date	**8/30/82**	**11/22/82**	**11/30/82**	**12/6/82**	**12/8/82**	**12/16/82**	**1/7/82**
Wt (pounds)	251	247	249	247	251	246	248
BP (sit)	140/110	170/130	200/130	170/130	5-Hour BP Check*	142/106	142/90
BP (std)	140/100	150/110	180/120	160/130		156/106	128/90
R_x Prescribed							
Furosemide	160 mg q 12 h			140 mg q 12 h			
Triamterene	400 mg daily						
Propranolol	160 mg q 12 h						
Prazosin	25 mg q 12 h						

* Five-Hour BP Check

	Usual Regimen			
Hour	**9 AM** ↓	**10 AM**	**12 AM**	**2 PM**
BP (sit)	170/120	150/116	146/106	140/104
BP (std)	160/110	150/100	132/98	130/96

Case 2 Five-hour BP check to evaluate side effects and adjust regimen Off all medication, Mrs. B.J., a 54-year-old black housewife, had a BP of 230/140 mm Hg. She had been on multiple regimens but had discontinued them because of side effects. She had had one lacunar cerebrovascular accident and several transient ischemic attacks, and she has diabetes mellitus, controlled on insulin. She complained of transient "tiredness" after taking her BP medication. It was impossible to determine whether the tiredness she described was related to hypotension or to another effect of her regimen. A five-hour BP check on 3/10/83 demonstrated marked exercise-induced hypotension 1.5 hours after taking the prescribed regimen of furosemide, propanolol, and prazosin. After exercise, the standing systolic BP was 74 mm Hg, and the diastolic BP could not be measured.

On 3/14/85 we did another five-hour check after we had adjusted the patient's medication. Postexercise systolic BP fell to 88 mm Hg and diastolic BP was recorded at 60 mm Hg. The patient complained only of being slightly tired, a complaint which subsided as the BP stabilized. The patient maintained good control on the adjusted dosage. This illustrates the value of measuring the standing pressure after exercise (10 steps using footstool), a maneuver that usually brings out maximum orthostatic BP reduction due to medications.

Date	**3/7/83**	**3/10/83**	**3/14/83**	**4/11/83**
Wt (pounds)	188	184	183	182
BP (sit)	174/100	5-Hour BP Check*	5-Hour BP Check†	150/100
BP (std p̄ exercise)	128/74			124/76
R_X Prescribed				
Furosemide	80 mg q 12 h			
Propranolol	80 mg q 12 h			
Prazosin	5 mg q 12 h		2 mg q 12 h	

* Five-Hour BP Check

Usual Regimen				
Hour	**9:45 AM**	**↓ 11:15 AM**	**12:30 PM**	**2:15 PM**
BP (sit)	184/92	154/90	148/96	152/80
BP (std p̄ exercise)	120/80	74/? (very "tired")	120/84	104/82

† Five-Hour BP Check

Adjusted Regimen Given			
Hour	**9:15 AM**	**↓ 10:30 AM**	**2:00 PM**
BP (sit)	172/100	150/80	160/90
BP (std p̄ exercise)	124/82	88/60 (Slightly "tired")	130/84

Case 3 Five-hour BP check to assess refractory hypertension A 62-year-old white female with a ten-year history of hypertension had been well controlled on a diuretic plus a beta-blocker. Then, over six months, her blood pressure became inadequately controlled despite doubling the dose of her medications.

Because of her failure to respond to her regimen the patient was admitted to the hospital and found to have an atherosclerotic stenosis of a renal artery. Following successful transluminal angioplasty the BP was ≤140/90 mm Hg on 40 mg of furosemide twice daily.

Conclusion

Office observation of five hours (or less) can provide several advantages in managing the patient whose BP remains difficult to control despite various efforts, medication changes, and complex regimens:

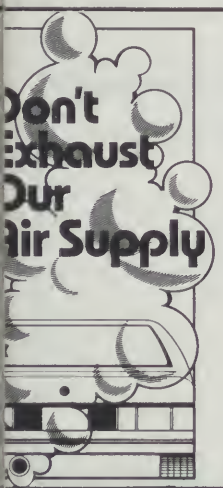
- it can lead to better control
- compliance with drugs and diet may be reinforced
- it is less expensive, and possibly more accurate, than hospital observation

This cost-saving procedure can be used in any ambulatory care setting.

Date	**4/23/83**	**7/16/83**	**10/15/83**	**11/12/83**	**11/14/83**
Wt (pounds)	180	179	181	180	180
BP (sit)	140/90	156/94	180/100	190/104	5-hour BP Check*
BP (std)	138/80	148/96	170/104	180/110	
R_x Prescribed					
Furosemide	60 mg q 12 h	_____	120 mg q 12 h	_____	
Propranolol	160 mg q 12 h	_____	320 mg q 12 h	_____	

* 5-Hour BP Check

	Usual Regimen			
Hour	**9:45 AM** ↓	**11:45 AM**	**12:45 PM**	**2:30 PM**
BP (sit)	210/106	200/102	194/100	198/102
BP (std)	200/108	190/104	186/102	190/104



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Today's Psychiatry

Post-traumatic Stress Disorder: Delayed for a Decade

GARY W. NYMAN MD

Nothing seems physically wrong with the patient! You have thoroughly examined this 36-year-old electrician with complaints of chest and stomach pains. Physical and laboratory values are within normal limits. He doesn't seem depressed, but he tells you of his bad dreams, his disturbed sleep, and his recent irritability with everyone.

This story is being heard more frequently by physicians of all specialties. It is occurring in seemingly healthy men who are Vietnam Era veterans. For over a decade they have seemed well adjusted at home and at work. And then, in response to any of a number of stressors, they begin to dysfunction. Some present with physical problems, like the electrician above. Others complain of mental distress like the fireman below.

A 42-year-old fireman was told he had adult onset diabetes two to three weeks earlier. His irritability and angry outbursts now seemed out of proportion to the mild presentation of his illness. His coworkers noted his difficulty sleeping at work and frequent awakenings from bad dreams. He was encouraged to see his family physician, and the following emerged: After being told he had diabetes, he began to feel more afraid he was going to die. He felt distant from others and began to think about his Vietnam experiences again. Despite his work as a truckdriver, he recalled being afraid for his life from ambushes, shellings, and the oppressive heat and unfamiliarity of Vietnam. He began to have nightmares of being shelled and awakened in a sweat in fear of approaching rockets. He felt guilty about his relative safety while in Vietnam since two of his friends were brutally dismembered in an explosion. It seemed to him so long ago, and he was unable to explain why he was now so upset and irritable.

The effects of an intensely traumatic event vary from individual to individual. All of us are vulnerable to a post-traumatic stress disorder. For some, it is acute, following the event closely. For others, it is chronic, with years of symptomatology. And for a growing number of Vietnam veterans, it is delayed, coming after more than a decade of relatively healthy living.

Below is a chart from the *Diagnostic and Statistical Manual of Mental Disorders*. It is especially useful to review these issues with patients who are Vietnam Era veterans, as the information may lead to the diagnosis of a treatable disorder.

DSM-III Diagnostic Criteria for Post-traumatic Stress Disorder

1. Existence of a recognizable stressor that would evoke significant symptoms of distress in almost everyone

2. Reexperiencing of the trauma as evidenced by at least one of the following:
- ☐ Recurrent and intrusive recollections of the event
- ☐ Recurrent dreams of the event
- ☐ Sudden acting or feeling as if the traumatic event were recurring because of an association with an environmental or ideational stimulus

3. Numbing of responsiveness to or reduced involvement with the external world, beginning sometime after the trauma, as shown by at least *one* of the following:
- ☐ Markedly diminished interest in one or more significant activities
- ☐ Feeling of detachment or estrangement from others
- ☐ Constricted affect

4. At least *two* of the following symptoms that were not present before the trauma:
- ☐ Hyperalertness or exaggerated startle response
- ☐ Sleep disturbance
- ☐ Guilt about surviving when others have not, or about behavior required for survival
- ☐ Memory impairment or trouble concentrating
- ☐ Avoidance of activities that arouse recollection of the traumatic event
- ☐ Intensification of symptoms by exposure to events that symbolize or resemble the traumatic event

Adapted with permission from *Diagnostic and Statistical Manual of Mental Disorders*, ed 3. Washington, DC, American Psychiatric Association, 1980.

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

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The Library Page

Cordell's Diary

Eugene Fauntleroy Cordell MD is one of my esteemed predecessors as Director of the Library of the Medical and Chirurgical Faculty of the State of Maryland. Dr. Cordell held this position first from 1870 through 1871, and then again from 1880 through 1887. The Faculty's archives contain Dr. Cordell's handwritten annual reports on the status of the library for those years. Dr. Cordell went on to serve as President of the Medical and Chirurgical Faculty in 1903–1904.

A few years ago, a diary that Dr. Cordell kept between the years 1903 and 1913 appeared. The diary was sold to Duke University and is now in the Manuscript Department of the University's Perkins Library. A friend of mine, G.S.T. Cavanagh, of the Trent Collection of The Duke University Medical Center Library, extracted parts of Cordell's diary for his annual friends-of-the-library publication and has graciously given permission to reprint them here.

JOSEPH E. JENSEN
Library Director

• • •

Eugene Fauntleroy Cordell is remembered as the author of *The Medical Annals of Maryland, 1799–1899*, a massive compilation over which he labored for years and which finally saw the light in 1903 largely because of the moral and financial support of William Osler. The Committee on the Centennial Volume of the Medical and Chirurgical Faculty had five members, but it appears that Osler was the financial mainstay of the project. From a journal of Cordell's now in the Manuscript Department of Perkins Library at Duke University, it appears that Osler was also a kind of spiritual mainstay to Cordell himself. His "Medical and Other Notes" fill about 160 pages, extending from 1903 to 1913, and must be unusual among private journals in that they are "Dedicated to my friend and benefactor Dr. William Osler, *Exemplar vitae morunque*, to whom Baltimore owes a debt which words cannot express for his unselfish public spirit, his inspiring leadership and his glorious example. He has banished discord from our ranks, has created in us new and higher aspirations and has enobled out lives."

Cordell was born in 1843 in Charlestown, then Virginia, now West Virginia. He served in the Confederate Army from 1861 to 1865, entered the University of Maryland Medical School in 1866, graduated in 1868, and made a modest living practicing and teaching in Baltimore until 1903 when, as appears from his journal, he was happy to be named "honorary Professor of Medical History and Librarian in the Medical School of my Alma Mater, with a salary of $200. . . . I will give a full course of lectures and will work up the library which is already a large and promising one, especially rich in old and rare books." His honorary position, he believed, was the first professorship in medical history in the country.

Writing him up for Kelly and Burrage's *American Medical Biographies* (1920) John Ruhrah recorded Cordell's modest accomplishments and said that he was "by disposition a bookworm." There are suggestions in the diary that his efforts to teach the history of medicine were not taken seriously by the University, and it was hinted to him that he might spare himself the trouble. Nevertheless he seems to have won Osler's wholehearted admiration as a man willing to make sacrifices in a good cause. From far-off Oxford Osler encouraged Baltimoreans to recognize Cordell by commissioning his portrait and when, in 1917, the Medical and Chirurgical Faculty established a book fund in Osler's name, Sir William's mind went back to Cordell. He wrote to Henry Barton Jacobs: "Think of the old days in those dismal rooms under the Hist. Soc! Dear Cordell! what a fine loyal soul he was!"

The journal begins with Cordell's appointment in 1903 and ends shortly before his death in 1913. In itself it is a valuable record of medical life and education in Baltimore. What follows are a few of the more colorful passages, especially as they refer to Osler.

Nov. 9 [1903]. Osler wrote me to dine with him informally. His wife and little William [probably meaning Revere Osler] were away and only his assistants Futcher and McCrae were there. He entertained us during the meal with readings from Fuller—very much



Medical and Chirurgical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian

like Sir Thomas Browne. . . . I spoke of my hairbreadth escapes during the Civil War. He said the people of Canada empathized with the South and he and his young friends would have gone to the South if they had had the means.

Dec. 2. Howard Kelly received $10,000 for operating on the daughter of Alex. Brown, the banker, for appendicitis . . . Kelly is by far the largest charger here and the stories of his high charges are rife. It is said that no such fees are gotten in Philadelphia, as the Hopkins men get here.

Dec. 20. Dr. Osler recently was called to Milwaukee to see a Mr. Pabst, a wealthy brewer. He found him suffering with incurable liver and heart disease. It is reported in the papers and around town that he received a fee of $10,000. When told of this he replied he wished it was the half of it.

Aug. 16 [1904]. First tidings recd. that Dr. Osler is to leave us and go to Oxford University . . . He has been the leader here since he came among us 15 years ago and a worthy one. His personal influence is astonishing. Every one regards him as his personal friend and many attribute to his advice their success in life. What a gap he will leave! Who will take his place? Who will keep up the library, the Historical Club, the cordial feelings he has established? Who will represent the Maryland profession?

Nov. 17. . . . Dr. Kelly is much given to religion and it was conspicuous in his address [at the opening of Cambridge Hospital]. Dr. Gorter told me that Kelly has asked him if he knelt down and prayed when he visited his patients and when G. said no he wanted to know his reason and said it was his duty to do so.

Dec. 20. [An account of the founding meeting of the Library and Historical Society of the University of Maryland] I dined by invitation at Dr. Osler's at 6:45, there being present Mrs. O, Dr. Futcher, Dr. Osler's nephew [W. W. Francis] and Miss Howard, daughter of Dr. Howard of Montreal, Dr. O's old preceptor. The dinner was plain—bouillon soup, roast beef, potatoes, tomatoes, rice, turnips, pudding, coffee, cigarettes and cigars, sherry and claret. The Dr. put me next to his wife, a handsome blond, full statured and now showing age—perhaps 52—altho' with evidences of great beauty. She looks like a person who had lived a society life, eating and drinking freely. She is very gracious in manner—not literary like her husband, evidently uncaring [?] of his literary and professional pursuits. She said, for instance in a complaining style that he had been out at some meeting every day last week. She declined wine and called for *whiskey*. Speaking of some one—her boy I believe—she said to him "he cares as little for money as you," at which the Dr. expressed surprise—rather feigned—I think. The Dr's nephew went upstairs and brought down while we were eating a Latin book, which he wished to show me—some collection of jests or jocular stories in Latin. The boy came in—a handsome, fair-haired boy, with pleasant bright manner—about 7. He spoke of his French poetry. His Mother made him tell us Goodbye—particularly called to him to tell Dr. Cordell goodnight. Dr. O. had a cab at the door and taking the books he was to use we drove up reaching there about 20 minutes of 8 . . . The whole building was lit up and looked quite well with electric lights, etc. . . . We went over to the library which I had gotten ready especially for this great occasion. Our 50 journals were on the tables, our card catalogue case displayed and both rooms opened . . . The Dr. expressed a wish for A. Burns Anatomy [possibly Allen Burns *Observations*] and I was able to give him a duplicate copy which he had. . . .

Next day I received a letter from Dr. Osler saying that he had noticed among the works exhibited in the library the 3d. ed. of Sydenham, on fevers, and that if compatible with the rules of the library he would be glad to possess it, to complete the set of all the editions of S[ydenham]. I at once sent it with "the compliments and best wishes of the Faculty of Physic." He replied thanking me and saying that it would give him great pleasure to present the Liby with a bound copy of Puschmann's complete work on the History of Medicine (the four volumes bound will cost him about $20). [This was not a bad trade for as Osler says (Bibl. Osl. 994) the copy was associated "with John Crawford, for whom see Cordell's article in the *Johns Hopkins Hospital Bulletin* and his *Annals*." In the *Baltimore Observer* (1806–7) Crawford had suggested the importance of insects as transmitters of disease. The entry continues:] Miss Noyes at the M and C F library spoke of his generosity in connection with Xmas a few days later. He gives an immense number of Xmas gifts. She said that she had actually shunned him on such occasions, feeling that his liberality was taxed to the utmost and she had no claim on him.

March [1905]. Liby fast growing: 1800 books added since I took charge July 1, 1903. . . . We can hardly realize that the Library is the same as that dusty, dead place, with crowded noisy students, dirty floors, swearing, etc., that I found there. Now there is quiet, 50 journals where there were none, many obedient readers, a good catalogue, many new books. . . . March 25. My second course on the History of Medicine closed. It began Oct. 1 and thus lasted six months—a lecture every Saturday at 9 AM. . . . Small audiences 15–20 at most—the least one only 2 and they came after I had entered the room. . . .

April 1. . . . Said Mrs. Osler to me Mar 16: "If I can keep Dr. Osler well and have some rest myself, that's all I want." The Dr. sailed for Europe from New York May 19 and they began pulling down his house here immediately to make way for an apartment house. . . .

The last time I saw Dr. Osler was on Monday, Mar 15th. I called at his house . . . to get a photograph of

him which I had left with his typewriter to have his name signed to it. He was in his office and greeted me most cordially—unusually so. The room was bare except two or three chairs and a table, but he bade me sit down and showed no signs of impatience altho' he must have been hurried. He asked me how things were coming down at the old University and in the conversation which ensued showed an apparently deep interest in our affairs. He spoke of the advantage we enjoyed in our name and expressed the opinion that we should do all we could to build up the institution. He did not agree with Judge Harlan that we should not revive an academic department because it antagonized the Hopkins, but thought the Hopkins could take care of itself and we were under no obligation to hold back on its account.

What one hears in the Park [1905]:

Humming of street cars,	chirping of birds
horn of automobile,	whistle of bicycle,
voices of people,	rustling of leaves,
rolling of wheels,	cawing of crows,
trampling of horses.	

1908. New library at University in Davidge Hall. Great improvement! Great advance! but no increase in my petty salary ($200). [It was soon after raised to $300 a year.]

Feb. 18, 1912. Dr. Randolph Winslow tells me he has ascertained that the following Baltimore physicians received the salaries opposite their respective names last year:

J. M. T. Finney	$107,000
Hugh H. Young	$116,000
H. A. Kelly	$127,000

[In 1912 at Osler's instigation funds were collected for a portrait of Cordell to hang in the Maryland medical school. He transcribed into the diary a letter to him from Osler dated May 6, 1912.]

Dear Cordell:

I am delighted to hear that the picture has been presented. I should have been very unhappy if you had crossed the *divide* before receiving this just recognition of all you have done for the profession of Maryland. You know, my dear Cordell, how much I have always appreciated your devoted and unselfish labors. You have done a great work for us — and one that will be remembered by coming generations. If the artist has photographs taken of the picture ask him to send me one. . . . If Dr. Welch's remarks [at the unveiling] are printed let me have a copy. It is nice to see so much of your good work in Kelly's Biography [*American Medical Biographies*]. Tis a fine work but there are grievous omissions—David Ramsay! one of our greatest and best—and a Maryland man—the Jacksons father and son and Henry I. Bowditch and Henry Bigelow!!!

Greetings to Mrs. Cordell.
Sincerely yours,
Wm. Osler.

Cordell records meeting Osler once more at the opening of the Phipps Psychiatric Clinic, April 16, 1913, "very little changed." The journal ends a few pages later. Cordell died August 27, 1913.

G.S.T. CAVANAGH
Trent Collection in the History of Medicine
Duke University Medical Center Library

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during November 1985.

	Number of Citations
1. Amiodarone and pulmonary fibrosis	18
2. Compartment syndromes, blood supply, ischemia, and nerve degeneration	23
3. Diagnosis and treatment of congenital hip dislocation	39
4. Diagnosis and treatment of Tourette's syndrome	29
5. Labor unions, collective bargaining, and hospitals	25
6. Multiple personality or dissociative disorders	26
7. Pathology of fetal death	26
8. Surgery of heart ventricle aneurysms	20
9. Teaching clinical competence to medical students and residents	38
10. Ultrasound, the ovaries, and the menstrual cycle	29

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

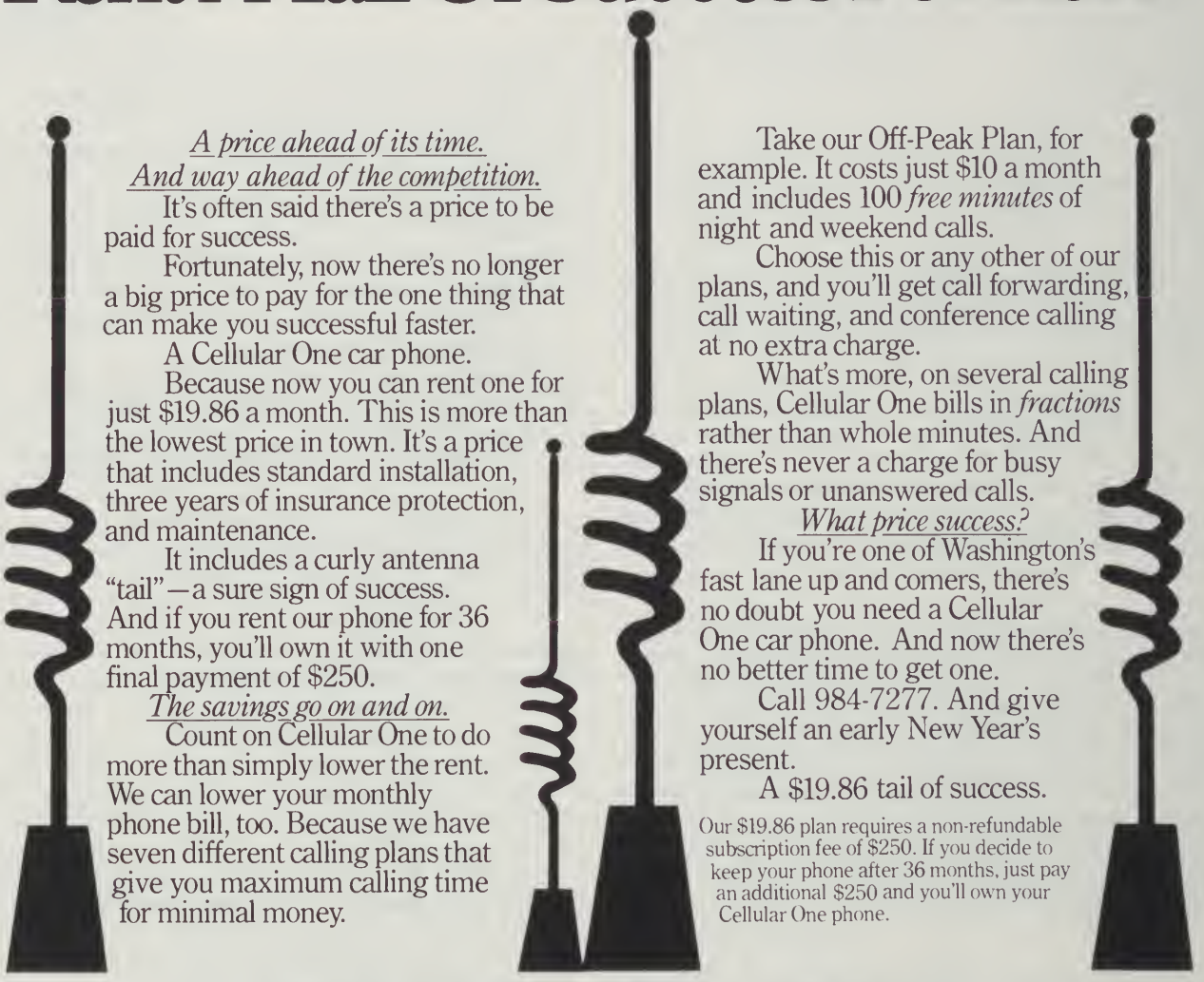
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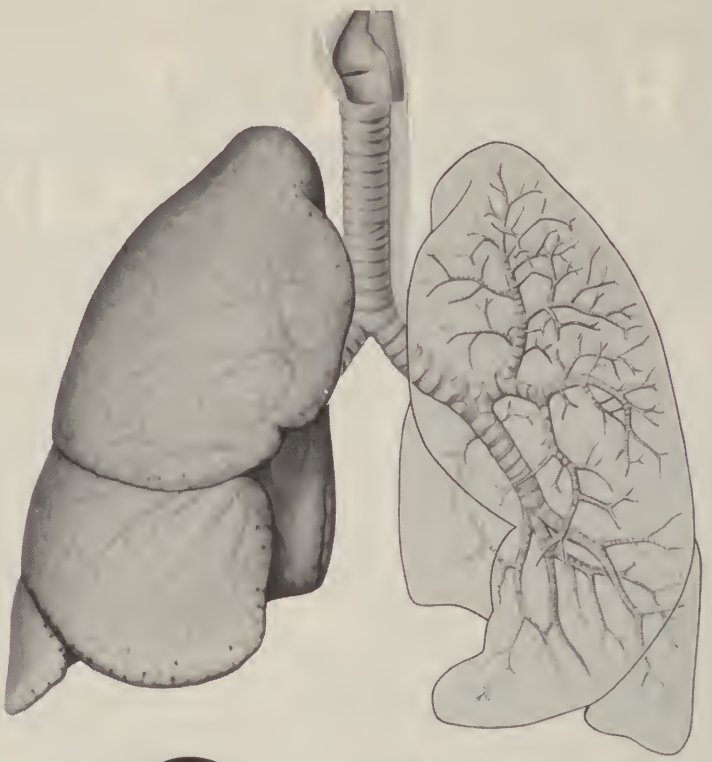
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Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

Note. Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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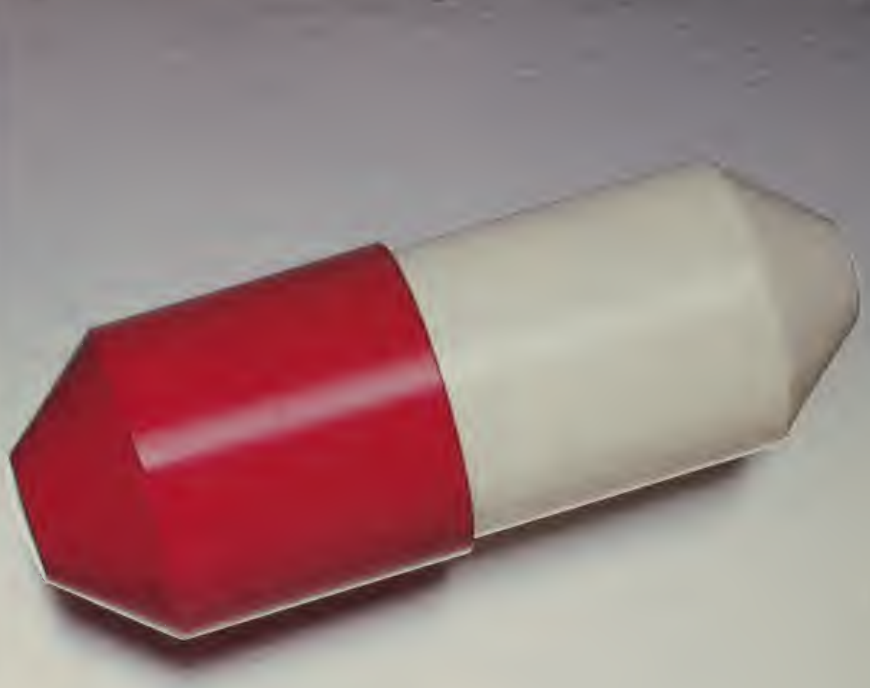
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Thiazides may add to or potentiate the action of other antihypertensive drugs.

Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

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Low Prevalence of the Booster Phenomenon in Nursing-Home Employees in Maryland

THOMAS P. GROSS MD, EBENEZER ISRAEL MD, PAT POWERS RN, GEORGE CAUTHEN ScD, and JEANNETTE ROSE RN

In 1983, to determine whether two-step tuberculin skin testing was justified for newly hired nursing-home employees, the Maryland State Health Department reviewed the two-step skin-testing results on nursing-home employees hired in 1981. In the 84 nursing homes surveyed, 64 percent of the new employees were given a two-step Mantoux test, and 0.4 percent exhibited a booster effect. All new employees were tested in 24 of the nursing homes, and 0.3 percent exhibited a booster effect. Total excess cost of doing the second skin test on the 2,558 employees was approximately $7,300. Maryland no longer recommends the two-step tuberculin skin test for newly hired nursing-home employees.

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During the early years of periodic tuberculin screening programs for hospital employees, the unexpectedly large average annual conversion rates reported (1.4 percent to 3.5 percent) were thought to be partially due to the booster phenomenon.[1-3] The booster phenomenon suggests a waned immunologic response to tuberculin antigen and is seen in two-step tuberculin skin testing.[4,5] A significant reaction may not occur with an initial skin test, but the immune system, having been exposed to tuberculin antigen at the initial test, is stimulated and a subsequent skin test produces a large area of induration.[6] This effect, detectable when tests are given at least seven days apart and up to a year or longer apart, is thought to indicate remote infection with either *Mycobacterium tuberculosis* or cross-reacting nontuberculous mycobacteria, or previous BCG vaccination.[7]

In 1978, Thompson *et al.* surveyed the booster phenomenon in 1,478 employees from ten hospitals throughout the United States and found a prevalence of skin test conversion due to the booster phenomenon to be of approximately 6 percent.[8] Due to their findings, two-step tuberculin skin testing was recommended jointly by the American Thoracic Society (ATS) and the Centers for Disease Control (CDC) for groups that are serially tested (including employees in nursing homes) to help distinguish recent from remote infection in these persons.

Until recently, Maryland was among 30 states recommending this test for newly hired nursing-home employees to screen for tuberculous infection. However, it was believed this use of two-step testing needed further evaluation. Thus, in mid-1983, the Maryland Health Department collected data on results of skin tests done in nursing homes in Maryland in 1981. The primary aim of the study was to determine the prevalence of the booster phenomenon in newly hired nursing-home employees in Maryland to see if statewide two-step testing was justified in this population. The excess cost involved in administering the two-step method also was estimated.

Methods

In 1981, newly hired nursing-home employees were screened for tuberculosis either by chest roentgenogram or two-step skin testing; the latter method was used by most nursing homes. Employees received their tuberculin skin tests from registered nurses at the nursing home within 10 days of employment. The Mantoux method, using 0.1 ml of 5 TU Tween-80-stabilized purified protein derivative (PPD) tuberculin antigen (Parke-Davis Aplisol* or Connaught Tubersol*) injected intradermally into the volar aspect of the forearm, was used for both steps. A significant reaction was defined as ≥10 mm of induration in the transverse plane when read at one week. If the reaction was <10 mm, a repeat skin test was placed on the opposite arm at that time and read within 48 to 72 hours. Although skin testing and recording of results were not monitored by the State Health Department, registered nurses in nursing homes in Maryland were experienced in the application and interpretation of the tests. Since no information was available on millimeter changes in the tests performed, a booster response for this study was defined as a response measuring <10 mm in induration on the first test and ≥10 mm on the second.

A systematic sample of 100 of the 300 nursing homes was obtained using an alphabetical listing of homes divided by geographic sector. Every third nursing home, starting with the first home listed in each of the four geographic sectors, was chosen for the study. Nursing

* Trade names are used for identification only and do not imply endorsement by the U.S. Department of Health and Human Services or the U.S. Public Health Service.

homes declining to participate were not replaced. Participating homes were asked to provide these data on employees hired in 1981: number hired, number of those hired who had an initial skin test, number found significant on the first test, and number with a booster effect. Since availability of information on age was limited, age data were obtained through a second questionnaire from a systematic sample of 15 percent of the participating nursing homes.

The estimate of the expense incurred in doing a second skin test took into account 1983 cost of materials including alcohol swabs, 26-gauge plastic tuberculin syringes, and PPD skin-test antigen; cost of nursing time spent in educating the employee, applying the test, maintaining records, and setting appointments; and cost of employee time lost from work in getting a second test and having it read at 48 hours.

Results

Of 100 nursing homes surveyed, 84 provided data and 16 either declined or had no available records. During 1981, the 84 nursing homes hired 3,978 employees. Of these employees, 2,659 (66.8 percent) received an initial skin test; of these, 101 (3.8 percent) had significant reactions. Those without significant reactions received a second skin test. Only 11 of 2,558 (0.4 percent) tested had a booster effect. Of the 11 people who had a booster effect, no more than two people were employed by any one nursing home, and no more than three people in any one geographic sector. The median age of the 11 people having a booster effect was 31 years, with a range of 18 to 59 years; 3 were older than 34 years (39, 45, and 59 years old). The median age of newly hired employees was 29 years. Of the 24 homes in which all newly hired employees were tested, only 3 of 886 (0.3 percent) employees had a booster effect. The median age of employees in these homes was 33.5 years. Total excess cost of the program accountable to the second-step test was about $7,286 (Table).

Discussion

In late 1979, the Maryland Department of Health, in accordance with recommendations from CDC,[4] recommended two-step tuberculin skin testing for newly hired nursing-home employees. Employees hired in 1981 had a very low prevalence of the booster phenomenon, both in the 24 homes in which all newly hired employees received a two-step test (3 of 886) and in the 84 homes as a whole (11 of 2,558). The number with skin test conversions due to the booster phenomenon could have been less had only those people with at least a 6 mm change between the nonsignificant and significant tests been counted. However, due to lack of information on millimeter changes in the tests performed, the actual number of these people could not be counted.

It could be argued that these results do not truly represent the prevalence of the booster phenomenon in newly hired nursing-home employees since there was no monitoring of administering, reading, and recording of results. However, this study is meant to derive results from a statewide program of tuberculin skin testing run by registered nurses experienced in the application and interpretation of these tests, and thus, it is essentially an experiment in a "real-world" setting. Results should be interpreted with this in mind.

In their study of 1,478 employees from 10 hospitals throughout the United States, Thompson, *et al.*[8] showed that 45 years was the median age of the 5.9 percent of employees noted to have a marked booster reaction (≥6 mm change), and that boosting increased with age. A possible explanation for the relative lack of booster effect seen in our study, in contrast to other studies, is the relatively young age of the employees. In support of this explanation is Valenti's study, done in 1980[9] at Strong Memorial Hospital, which found no marked booster reactions among 416 newly hired employees whose median age was 24.5 years.

The prevalence of sensitization to tuberculous and nontuberculous mycobacteria varies with certain population characteristics, most notably age and geographic locale. Also, an increased response to tuberculin after repeat skin testing has been shown in those with cross-reacting sensitivity to nontuberculous mycobacteria.[7] Thus, the relative lack of a booster effect observed here is more notable since Maryland has a relatively high incidence of tuberculosis (14.6 cases/100,000 population in 1981) as well as high isolation rates of nontuberculous mycobacteria (5.06 isolates of *M. avium*/100,000 population in 1979).[10]

The total excess cost of the program ($7,286) must be weighed against the cost of preventive treatment

Table. Estimated Excess Cost of Second Skin Test on 2,558 Employees, Maryland, 1983

Materials		
Alcohol swabs	$ 62.68	
Tuberculin syringe	482.18	
PPD-S, Tween 80 (10-unit vial)	296.73	
	841.59	(or $0.33/person)
Nursing time ($8.10/hour)		
Second test and return at 48 hours—9 minutes	3,120.76	(or $1.22/person)
Employee time ($5.20/hour)		
Second test and return at 48 hours—15 minutes	3,323.75	(or $1.30/person)
Total	$7,286.10	

with isoniazid and its risks, most notably in those over 34 years old. Although in our study 11 people may have avoided unnecessary exposure to isoniazid with two-step testing, only 3 of the 11 people with the booster phenomenon were older than 34. Thus, in less than 0.2 percent of those two-step tested the possibility of adverse reactions to isoniazid is of great enough magnitude to be an issue.[11] Also, the cost of two-step testing must be weighed against the difficult to estimate cost of materials and personnel time spent searching for nonexistent recent exposures to TB, which presumably occurred in the interval between annual skin tests in those persons noted to convert.

Ultimately, the value of any program should be measured by its cost versus possible benefits. Based on this consideration and the foregoing analysis, Maryland no longer recommends the second tuberculin skin test for its newly hired nursing-home employees. It is suggested that other states or institutions do pilot studies of the prevalence of the booster phenomenon in their own periodically screened populations to determine whether two-step testing is justified.

Acknowledgments

Special thanks to Dianne Dwyer MD, Public Health Officer with the Baltimore City Health Department and to Dixie Snider MD, Chief, Research and Development Branch, Division of Tuberculosis Control, Centers for Disease Control, Atlanta, GA.

References

1. Berman, J.; Levin, M.L.; *et al.* "Tuberculosis Risk for Hospital Employees: Analysis of a Five-year Tuberculin Skin Testing Program. *Am J Public Health* 71(1981):1217–22.

2. Dandoy, S. and Hansen, R. "Tuberculosis Care in General Hospitals. Arizona's Experience." *Am Rev Respir Dis* 112(1975):757–63.

3. Ruben, F.L.; Norden, C.W.; *et al.* "Analysis of a Community Hospital Employee Screening Program 31 Months after Its Inception." *Am Rev Respir Dis* 115(1977):23–28.

4. Farer, L. and Atkinson, M.L. "CDC Recommends 2-step TB Skin Testing for Hospital Employees; New Scheme Copes with "False Positive" Conversions." *Hosp Infect Control* 6(1979):1–4.

5. Bass, J.B. and Serio, R.A. "The Use of Repeat Skin Tests to Eliminate the Booster Phenomenon in Serial Tuberculin Testing." *Am Rev Respir Dis* 123(1981):394–96.

6. American Thoracic Society and Centers for Disease Control. "Diagnostic Standards and Classification of Tuberculosis and Other Mycobacterial Diseases, 1981." *Am Rev Respir Dis* 123(1981):343–58.

7. Richards, N.M.; Nelson, K.E.; *et al.* "Tuberculin Test Conversion During Repeated Skin Testing, Associated with Sensitivity to Nontuberculous Mycobacteria." *Am Rev Respir Dis* 120(1979):59–65.

8. Thompson, N.J.; Glassroth, J.L.; *et al.* "The Booster Phenomenon in Serial Tuberculin Testing." *Am Rev Respir Dis* 119(1979):587–97.

9. Valenti, W.; Andrews, B.A.; *et al.* "Absence of the Booster Phenomenon in Serial Tuberculin Skin Testing." *Am Rev Respir Dis* 125(1982):323–25.

10. Good, R.C. "Isolation of Nontuberculous Mycobacteria in the United States." *J Infect Dis* 142(1980):779–80.

11. Kopanoff, D.E.; Snider, D.E.; *et al.* "Isoniazid-related Hepatitis, a U.S. Public Health Service Cooperative Surveillance Study." *Am Rev Respir Dis* 117(1978):991–1001.

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Results of Mandatory Screening for Cervical Cancer in a Black Population

JOSEPH M. MILLER MD, DONALD C. CHAMBERS MD, and JOHN M. MILLER BS

The authors are at Provident Hospital, Inc., Baltimore. This work was partially supported by the United Way of Central Maryland.

In 1977 the Maryland Legislature directed that a "uterine cytologic examination" be offered to every female hospital inpatient as of July 1, 1977. Further language changes were effected for clarification, and the Annotated Code of Maryland now contains a specific statement about the examination:

(a) Each hospital shall offer to each female inpatient of the hospital a Papanicolaou smear for detection of cervical cancer unless:
  (1) the attending physician orders otherwise.
  (2) the patient has had the examination within the preceding year.
(b) A patient may refuse the examination.[1]

Introduction of the Papanicolaou technique for the study of possible morphologic change in the cervical cells was a significant diagnostic event. The natural evolution of carcinoma of the cervix provides ample time during which studies may be made. Discovery of malignancy at an early stage allows the physician to offer effective treatment; treatment in an early stage results in cure in a high percentage of carcinoma of the cervix cases.

Population Screened

Black women (18 years of age and older) admitted to all clinical services of a general hospital for a wide variety of medical and surgical reasons were offered the opportunity of having a Papanicolaou smear done as designated by law. The number of women who had a smear done previously and the number who refused examination are not known.

The problems of false/positive and false/negative retrieval rates were not addressed since such information can be obtained only with tight environmental control, as in a private office. The logistical difficulty of determining these rates in a general hospital where patients may be cared for by over 200 physicians is readily apparent.

A total of 1,390 examinations of screening were available for analysis: 195 had atypia, metaplasia, dyskeratosis, or hyperkeratosis representing a combination of inflammatory and reparative processes; 19 had dysplasia; and three had more serious lesions. One patient had a smear highly indicative of cervical squamous cell carcinoma that later was disproved by more detailed studies; two had cancer.

One further aspect of the examination as mandated by law should be recognized. In the total group of 1,390 women, 582 had had a hysterectomy for benign uterine disease and five for uterine malignancy. This subset contained 39 examinations showing atypia: two with dyskeratosis and three with hyperkeratosis.

The incidence of inflammatory and reparative changes in women still having their uterus was 18.7 percent, almost three times the number found in posthysterectomy women (7.1 percent). All women who had had a hysterectomy for malignant uterine disease had negative smears.

Discussion

The cost of performance of the 1,390 smears, including payment for personnel, was approximately $17,400 ($12.49 per test). The economic argument for not doing smears may be dismissed because the discovery and successful treatment of one carcinoma would more than justify the expenditure. Treatment of dysplasias or infections also might avert serious complications, and they may be found only by a study of vaginal smears.

Modification of the law might be considered: in the posthysterectomy patient, smears might not be done or the period between smears might be comfortably extended by the gynecologist. In this subset, the physician is looking primarily for vaginal cancer, a particularly unusual occurrence in black women.[2]

References

1. Md. H.G. Code Ann. §19-348 (1982).
2. Lang, W.R.; Menduke, H.; and Golub, L.J. "The Delay Period in Carcinoma of the Vagina." *Am J Obstet Gynecol* 80(1960):341–46.

The following article was the basis for a presentation given by Dr. Vincent at the Medical Family Seminar on November 7, 1985, sponsored by the Committee on Physician Rehabilitation in association with Med-Chi's Auxiliary.

A Well Doctor's Family: The Struggle for Intimacy

MERVILLE O. VINCENT MD

The physician is a very special person. He has, first of all, been molded to get into medical school; then, chosen by a medical school he is molded further by medical education and training. Given that the physician under discussion has a family, it is safe to assume that he struggles with conflicting priorities between profession and family.

Dr. Vincent is Executive Director, The Homewood Sanitarium, Guelph, Ontario, Canada.

It is safe to assume there is a difference between the family of the well doctor and the sick doctor even though most physicians and their families struggle with similar pressures. All psychiatric illness as well as alcohol and drug dependencies involve the whole family as a closely interacting unit. One's vulnerability to emotional illness is either lessened or magnified by one's marriage. "In choosing a marital partner and raising children, one initiates a new set of close relationships which may either give (him) added protection against mental illness or aggravate his inclination toward it."[1] I focus on the male physician's marriage, although many of the issues apply to both male and female doctors.

Marriage and Mental Health

Several observations about the relationship between marriage and mental health are worth noting:

- Glen and Weaver noted that marital happiness is the factor contributing most to global adult personal satisfaction.[2]
- A poor marital relationship is a characteristic of female patients who attempt suicide.[3]
- Marital adjustment is a vulnerability factor associated with depression in men.[4]
- Vaillant suggests that adult male psychosocial adaptation is a correlate of successful marriage.[5]
- Recently, Waring *et al.* reported high levels of intimacy were associated positively with marital adjustment and low ratings of marital intimacy were significantly associated with nonpsychotic emotional illness.[3]

Lewis in his excellent book described his research on healthy families.[6] A healthy family was defined as one that does two things well: preserving the sanity and encouraging the growth of both parents and producing healthy children. The original research was published under the title *No Single Thread*[7] indicating there were ten or twelve factors combined that made families highly competent. However, researchers concluded that the better the parents' relationship, the greater the likelihood that the family will be competent. The worse the parents' relationship, the greater the likelihood that the family as a whole will be in trouble. They found that healthy marriages were characterized by deep levels of intimacy. There were no concerns that intimate communication would lead to rejection or a competitive disadvantage. They were good friends as well as spouses. They could tolerate and enjoy individual differences.

These findings take on additional importance when related to findings that the mental health of children is more closely related to the quality of the relationship between the husband and the wife than the degree of mental health possessed by either parent.[8]

My thesis is that intimacy encourages a healthy marriage. A healthy marriage encourages the mental health of husband, of wife, and of the couple's children.

From these general comments about marriage and mental health, let us turn specifically to physicians. The most publicized problems in physicians' families are depression, alcohol dependency, drug dependency, marital conflicts, and suicide.

Two questions we might have on the back burner as we discuss the physician's marriage are: How do these problems interrelate? Is there anything unique about the marital problems of physicians?

Importance of Intimacy

One important need that marriage can meet is the human need for intimacy. Indeed, Lewis states "the way in which faltering families fail is that they do not produce an environment conducive to intimacy . . . the mothers appear to be bearing the brunt of the pain.

"The husbands also seem to be missing something. Emotionally isolated, keeping their feelings inside, they forge through life alone getting satisfaction from material objectives and career performances."[7] This reminds me of too many medical marriages.

The married couple that meet each other's needs and enjoy a meaningful and happy relationship have an "intimate contact." "Intimate contact is that close contact between two individuals in which they reveal themselves in all their weakness without fear. It is a relationship in which the barriers normally surrounding the self are down. It is a relationship that characterizes the best marriages and all true friendships. We often call it love. Two essential preconditions without which relationships cannot mature:

"(i) The people concerned must see each other very often, almost everyday, although not necessarily

for very long at a time.

(ii) They must see each other under informal conditions, without the special overlay of role or situation they usually wear in public.

"If two people do sometimes talk about the ultimate meaning of their lives, then we are fairly safe in calling their contact an 'intimate contact'."[9]

The work of several investigators suggest the clinical importance of the quality and quantity of interpersonal intimacy to marital adjustment, family functioning, and adult psychosocial adaptation.

Waring defined intimacy operationally as a "multifaceted dimension of an interpersonal relationship at a point in time, the level of intimacy, which is a composite of:

1. Conflict resolution—the ease with which differences of opinion are resolved.
2. Affection—the degree to which feelings of emotional closeness are expressed by the couple.
3. Cohesion—a commitment to the marriage.
4. Sexuality—the degree to which sexual needs are communicated and fulfilled by the marriage.
5. Identity—the couple's level of self-confidence and self-esteem.
6. Compatability—the degree to which the couple is able to work and play together comfortably.
7. Autonomy—the couple's degree of positive connectedness to family and friends [the success with which a couple gains independence from their families of origin (and their offspring)].
8. Expressiveness—the degree to which thoughts, beliefs, attitudes and feelings are communicated in the marriage."[10]

Using this definition, Waring's studies tend to confirm the hypothesis that intimacy in marriage predicts marital adjustment, while lack of intimacy is associated with nonpsychotic emotional illness and psychiatric help-seeking behavior.

One of the biggest problems in floundering medical families is the failure to develop intimate relationships within the family. Many medical marriages hit difficulties when the couples are in their forties. Often the problems are a result of recognizing failure to develop intimacy. Typically, the wife of the physician accepts the hard work and long hours of medical school days, tolerating the situation because she believes there is light at the end of the tunnel. This does not appear during the hard years of internship and residency, and then the physician gets fully absorbed in establishing a practice and in medical activities. Finally, his time commitment to medical practice does not decrease after he is well established. It is then she realizes that the light at the end of the tunnel is a mirage. Often the wife recognizes she has been an emotional widow for years with a husband who just wants to be looked after when he is home.

Background of the Problem

The basic problem presented by the medical marriage is how does one function effectively in two demanding systems? It is not easy to be a good physician; it is not easy to be a good spouse and parent. It is downright difficult to function well in both systems.

Let me compare and contrast the requirements of being a good physician and being a good spouse and parent.

- The good physician can control feelings. A good spouse and parent is able to express feelings.
- A good physician works hard. A good spouse and parent is available for companionship.
- A good physician is usually characterized by the following needs: success, status, prestige, professional-esteem, and money. To fulfill each of these needs requires time away from the spouse and parent relationship.
- Patients want a physician who is available, current, and good-humoured. Families want a spouse and parent who is available, helpful, and good-humoured.

Thus, the two systems compete for the physician's energy, time, and attention. The crux of the problem is that when we can do one thing much better than another, we often direct our energies toward that which we do better, neglecting the other area. I suggest that many good doctors when confronted simultaneously with both family and professional problems prefer the medical pressures.

Entrance Requirements

Both systems we are involved in have their demands and rewards. However, the rewards from each are directly related to the time spent in each. Why are we more likely to be good physicians than good spouses? Part of the answer may lie in the fact that it was much easier to get into marriage than it was to get into medical school.

Screening for medical school is rigorous. Competition is keen. The number one entry qualification for medical school is top marks. Thus, even to enter this system one has to endure a highly competitive selection system that guarantees most people who get into medical school will have an abnormally high tolerance for delay of gratification. They will be capable of sustained effort without immediate reward, and they have shown the

ability to set relationships aside in order to read, study, and get ahead. They are likely to have high standards for themselves and others, at least in selected areas. These people are often self-critical and critical of others.

If I were on the Selection Committee to enter the other system we call marriage, what would I have in mind? I would look for personal attributes such as warmth, empathy, patience, generosity, ability to relax, and a sense of humour. I would look for evidence of ability to form and maintain intimate relationships, flexibility, the ability to set aside work for the personal needs of family members. I'd look for people who are fun to be with, open, good communicators, expressive, not suspicious, not negative, not defensive, or not overly competitive in personal relationships. I might even hope they came from a warm, secure childhood where they had close relationships with both parents. The requirements would be high. It probably would be easier to get into medical school. Yet, these are some of the qualities helpful to functioning in the family system. While they may be useful characteristics for the practice of medicine (and I believe they are), they don't help and could conceivably deter getting into medical school. In fact as Sargent has observed "it may be said that the high performer in the medical system may be handicapped in the family system. This fact alone may prime the medical family for mal-function."[11]

Nevertheless, we are in two systems. One selected us because of certain characteristics and abilities that were further developed by years of training in medical school, internship, and residency. We are highly trained to carry out effectively the activities and goals in the one system we have chosen: medicine. Conversely, to enter the system of marriage (let alone parenthood), we did not have to pass any selection criteria, nor at any time did we receive much formal training in how to function well in the family system.

Common Needs and Conflicting Pressures

Pressure based on the apparent needs of patients and colleagues and the absence of specific working hours causes some physicians to get so busy in the medical system that there is not sufficient time left for the family system. They are caught in the activity trap. They become so enmeshed in the activity of one system that they neglect the other.

Certain basic needs that we all have (such as to be needed, to be valued, to be appreciated, to be loved, to be accepted) can motivate us to be caring physicians. Evidence suggests that the physician who has grown up with considerable personal insecurity is most likely as an adult to have an excessive amount of the normal needs. Thus, insecurity can produce an excessive need to be valued, appreciated, loved, and accepted. Further, such persons are likely to feel more secure in the medical system for which they have been trained than in the family system for which they have not been trained. They have learned how to have personal needs met by being good physicians and have not learned how to have needs met in intimate family relationships. It is paradoxical that the very needs that could and should be met within the family also can prevent us from becoming good family members, with the reciprocal meeting of needs.

Confronted by tensions at home, the physician is tempted to retreat to professional pursuits that use one's years of training, the area where the *New England Journal of Medicine* does help solve problems. Didn't our medical training teach us, at least by example, that work always was first and personal and family needs would come later if, and only if, there was time? Didn't medical training suggest to many of us that *our* needs and the importance of family relationships should not interfere with our work?

Medical school, internship, and residency, however, require good marks, singlemindedness, an intelligent, logical, unemotional approach to life combined with a capacity for hard work. The result is that the physician often emerges from this process overly impressed with medical science and technology while undervaluing human relationships; thus, many physicians are workaholics, overcommitted to work and undercommitted to their own personal needs and the reciprocity of close relationships. Often, they don't appreciate their own value even in the doctor-patient relationship, apart from their technical skills.

The system of medical practice with its infinite demands and absence of clear-cut limits of responsibility provides physicians with a unique opportunity to cop-out acceptably when marital tensions develop. Rather than these tensions leading to sharing and intimacy, physicians often become more deeply involved in professional activities that bring greater admiration with less responsibility, more sense of accomplishment with less uncertainty than intimate relationships at home provide. However, this aggravates problems in the family system and fails to meet the physician's own need and that of the medical family for intimacy.

Self-esteem is important to everyone's functioning. We reach adulthood with a given amount of self-esteem, but this is not a static entity. I believe people's self-esteem continues to be influenced by three factors. The first is the quality of their intimate relationships. Second is the satisfaction obtained through their work or

personal accomplishments. Third is a belief system or philosophy that sanctions their personal value and worth apart from their productivity and gives life, suffering, and death a meaning and a purpose.

Physicians as a group and individually are suffering from a loss of professional self-esteem at this point in history. We often believe we are not understood by the public and our patients. To be understood is one of the benefits of an intimate relationship. Failure to develop intimate relationships at home further add to the general feeling of not being understood and further depresses self-esteem. Yet, doctors have not always been held in as high esteem as we might imagine. This is confirmed by the comment of Daniel Gilman, President of Johns Hopkins University in the late nineteenth century, when he said "one son in the family too weak to labour on the farm, too indolent to do any exercise, too stupid for the bar, too immoral for the pulpit; went into medicine."[12] In the latter part of the nineteenth century, 28 percent of all college graduates went into medicine. Therefore physicians did hold a unique place in society. Today, rather than being seen as a highly educated, concerned, and caring profession, we are often regarded by the public as businessmen in unionlike activities. Often we think our only alternative is to become civil servants; we don't feel good about either option. The public sees us as part of a high-earning health establishment; some even suggest that we are bad for people's health, that we overoperate, that we overprescribe, that we "medicalize" life's problems, that we don't really understand the latest avant-garde issues whether it be sex, anxiety, or feminism. We get more media attention for malpractice than for good practice.

Despite the fact that our times may make it difficult to maintain self-esteem in our professional lives, professional-esteem is achieved by many physicians through busyness, hard work, high commitment to their patients and to the profession, which in turn brings recognition by patients, colleagues, and society. This is often done at a cost. Too late, many discover the cost was too high. While obtaining professional esteem, the physician has lost closeness and esteem at home. I suggest to you that this is related to problems that occur in medical families such as marital breakdown, depression, addiction, and suicide, all of which occur too often in both physicians and their spouses.

Spouses of workaholic physicians often feel unneeded in the relationship. Some physicians appear to have their needs to be valued and appreciated met through their professional activities. Such a physician usually has not allowed the time to spend with the family, the time that would indicate to family members that they are important and cared for. Family members then feel they can do nothing for the self-esteem of the physician, and the physician by neglect, does nothing for the family members' individual self-esteem. Often the result is everyone feels used.

Intimate relationships, on the other hand, feed mutual self-esteem. Being appreciated within the family, as well as at work, adds to self-esteem. At a time when the public appreciates us less, we need the appreciation of our spouses and families even more. Both the practice of medicine and the practice of family living have their rewards. A misplaced emphasis puts us at risk of being good physicians (perhaps even healthy physicians) while missing the satisfaction of being good spouses and parents. Medical practice was not designed to meet our needs to reveal ourselves with all our weaknesses and fears, to meet our needs for affection, sexuality, or companionship, to share our thoughts, beliefs, and feelings. Marriage and the family can provide such intimacy, sharing, and growth in the presence of enduring relationships, where one's self-esteem or acceptance is based primarily on the relationship not on productivity.



The risk in many medical families in recent decades has been that the doctor's wife would not achieve a sufficient sense of personal fulfillment. His success has not been felt as her success. Dual-career families should resolve some of this tension. Each partner can achieve some satisfaction both in the family relationship and in their individual careers. Yet the very success and individual fulfillment that could save some families from the trap of the single-career family also could result in husband and wife leading separate, parallel lives rather than enjoying a mutually shared intimate experience.

Dual-career families, a growing phenomenon in our times, are by no means limited to medical families. If these couples decide to have children, I believe one or both parents must sacrifice something of their careers to provide time to spend with the next generation. Parental time is perhaps the most important ingredient in raising secure, confident, loved children who will have learned the joy and safety of intimate relationships within their own families. Such children will grow up able to build similar families of their own. Our careers

are important but not at the expense of our personal and family relationships. One career as demanding as medicine is not easy to combine with family life. Two demanding careers in a medical family make the task even more difficult, but no less important.

I call your attention to one other pattern we learned in the medical system, that just may carry over into our marriages. In medical school, we learned many things that at a later time we could begin to ignore. After being deeply involved in anatomy, histology, or embryology, one reaches a level of mastery of the subject, only to drop it and get on with being a physician. Having qualified as a general physician, many of us have then promptly dropped all the rest of medicine except for our particular specialty. In our academic commitment, we "love 'em and leave 'em." I wonder if this carries over into our marital relationships? When they first dated their wives, most physicians who later become too busy to nourish their wives were very romantic, full of conversation, and looking for companionship. Intimacy, in the broadest sense, was deepening with every encounter. Then they became an M.D., a Married Doctor. They promptly forgot about romance, communication, companionship, and intimacy just as they had dropped their anatomy or histology and busied themselves with being a doctor.

The physician's marriage can be approached in many ways. I have focused on the importance of intimacy in marriage for the well-being of each member of the family. Also, I have tried to spell out some of the factors in physicians' personalities, education, and work that make the struggle for intimacy in the medical marriage a continuing struggle.

For about twenty years, I have had a professional interest in medical marriages.[13–17] I have heard it said that we North Americans get married for "better or worse," but not "for good." Toffler observed that in a world of rapid change we need stability zones in our lives.[18] On the personal level, I have been part of a medical marriage for thirty years. From this vantage, as the father of four, father-in-law of two, and grandfather of three, I wish to assure even the most skeptical among you that the struggle is worth it. I recommend the intimacy of an enduring marriage as the best "future-shock absorber" I have found.

References

1. Ackerman, N.W. *The Psychodynamics of Family Life: Diagnosis and Treatment of Family Relationships.* New York: Basic Books Inc., 1958, p 89.
2. Glen, N.D. and Weaver, C.N. "The Contribution of Marital Happiness to Global Happiness." *J Marriage Family* 43(1981):161–68.
3. Waring, E.M.; McElrath, D.; Mitchell, P.; Derry, M.E. "Intimacy and Emotional Illness in the General Population." *Can J Psychiatry* 26:(1981):167–72.
4. Roy, A. "Vulnerability Factors and Depression in Men." *Br J Psychiatry* 138(1981):75–77.
5. Vaillant, E.G. "Natural History of Male Psychological Health: VI Correlates of Successful Marriages and Fatherhood. *Am J Psych* 135(1978):653–59.
6. Lewis, J. *How's Your Family?* New York: Brunner/Mazel, 1979.
7. Lewis, J. *et al: No Single Thread.* New York: Brunner/Mazel, 1976.
8. Westley, W.; Epstein, N. *The Silent Majority.* San Francisco: Jossey-Bass Inc., 1969.
9. Ewald, W.R. *The City as Mechanism for Sustaining Human Contact in Environment for Man.* Indiana University Press, 1967.
10. Waring, E.M.; McElrath, D.; Lefcoe, D.; Weisz, G. "Dimensions of Intimacy in Marriage." *Psychiatry* 44(1981):169–75.
11. Sargent, D.A. "Work in Progress: Preventing Suicide Among Physicians and Other Members of the Health-care Team." *Conn Med* 45(1981):583–86.
12. Martin, M.J. "Psychiatric Problems of Physicians and Their Families." *Mayo Clin Proc* 56(1981):35–44.
13. Vincent, M.O. "Dr. and Mrs: Their Mental Health." *Can J Psychiatry* 14:(1969):509–15.
14. Vincent, M.O. "The Doctor's Marriage and Family." *Nova Scotia Med Bull* Dec, 1971.
15. Vincent, M.O. "The Physician's Marriage: Mission Impossible?" *Ont Med Rev* 44(1977):7–13.
16. Vincent, M.O.; Hill, M; Tatham, M.R. "The Physician's Marriage, Husband, Family and Practice" *Ont Med Rev* 43(1976):350–56.
17. Vincent, M.O. "The Physician's Own Well-Being." *Ann R Coll Physicians Surg (C)* 14(1981):277–81.
18. Toffler, A. *Future Shock.* New York: Bantam Books, pp. 377–82, 1970.

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MIEMSS: Topics of Interest

The Banking and Clinical Use of Human Skin Allograft in Trauma Patients: The Banking of Allograft Skin in Maryland

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The purpose of a skin graft is to convert an open wound into a closed wound. Clinically, covering a wound with viable allograft performs exactly the same function (temporarily) as an autograft. Either procedure confers many benefits on the wound.

Since Brown[1] established its routine use and particularly since the establishment of skin banks in the late 1960s, the use of allograft skin to temporarily close the wounds of burn patients has become commonplace. Although antibiotic creams, xenograft (for example, pigskin), and even synthetic skin substitutes are available and are used, most burn physicians agree that, next to the patient's own skin graft, skin allograft is the ideal burn dressing.

Many burn units have incorporated small skin banks. Several larger banks are used as resources for local burn units with insufficient skin. However, burn units often are unable to obtain skin because the inventories of most skin banks, even the larger ones, are chronically depleted. Generally, the overall supply of allograft skin is grossly inadequate.

The Baltimore Regional Burn Center is a good example. In the years since its founding in 1968, several attempts have been made to establish a skin bank. These attempts repeatedly failed due to the dearth of donors relative to the high volume of burn patients. When a severely burned patient requiring allograft skin as a life-saving measure was admitted, it was necessary to call several skin banks nationally to supply the skin. Often no skin was available.

Also located in Baltimore, the Shock Trauma Center of the Maryland Institute for Emergency Medical Services Systems (MIEMSS) was established in 1969. It was one of the first regional trauma centers to use the Medevac system of transporting severely injured patients from accidents all over the state to a central treating facility. With this concentration of severely injured patients in the MIEMSS facility located at the University of Maryland Hospital, a large number of major nonburn traumatic wounds were seen. The need for allograft skin in this setting was apparent, consistent with the work reported by Shuck from his experience at Fort Sam Houston.[2,3]

Thus in the Baltimore metropolitan area and the state of Maryland there was a need for allograft skin for biological dressings. However, there was no organized facility to store the tissue and to make it readily available.

The University of Maryland Hospital may be unique in being within a locus of excellent donor sources for cadaveric tissue. Within the campus are (1) the State Anatomy Board, established by state law to receive and distribute anatomical material donated to benefit the people of the state; (2) the Maryland Organ Procurement Center, Inc., a nonprofit organization established to harvest and distribute organs and tissues donated for transplantation; (3) the MIEMSS Shock Trauma Center, in receiving the most seriously injured patients in the state thus has a higher than normal patient death rate and is the leading donor institution for transplantable organs and tissues in the state; (4) the Maryland State Medical Examiner; and (5) the University of Maryland Hospital Mortuary Department. The headquarters of Eye Banks International (formerly the Maryland Medical Eye Bank), the largest eye banking organization in the world, are located within blocks of the University of Maryland Hospital. This unique donor situation made the University of Maryland Hospital the natural site to establish a skin bank to meet the perceived demand for allograft skin within Maryland.

With the support of the Department of Surgery, particularly chairman Joseph McLaughlin MD, funds were allocated for the establishment of the University of Maryland Tissue Bank and Laboratory. It began operation on January 1, 1984. On July 1 that year it was incorporated as a nonprofit organization and renamed the Maryland Tissue Bank and Laboratory, Inc. (MTBL). In close cooperation with the Maryland Organ Procurement Center, MTBL was developed and equipped, using state-of-the-art technology, to have the capability of storing any cryopreservable tissue (tissue in the frozen state).

Generally, cryopreserved tissue must be exposed to a "cryoprotectant" (glycerol in tissue culture media containing antibiotics) after it is removed from a cadaveric donor under aseptic conditions. The tissue then is tested, measured, graded, and packaged prior to freezing under careful, computerized control to −70 degrees centigrade using liquid nitrogen (Figures 1A and B, next page). Short-term storage is at −70 degrees, but equipment is present to store the tissues indefinitely at −196 degrees centigrade in a liquid nitrogen freezer (Figure 2, next page).

Public Education

Media attention to the opening of the skin bank resulted in early public awareness and gratifying public cooperation. Several donations were made at that time as family members became aware of the potential for donating tissues on the death of a loved one and gave



Figure 1A. Prepared allograft skin ready for packaging.



Figure 1B. Flat-format package used to freeze and store allograft skin.

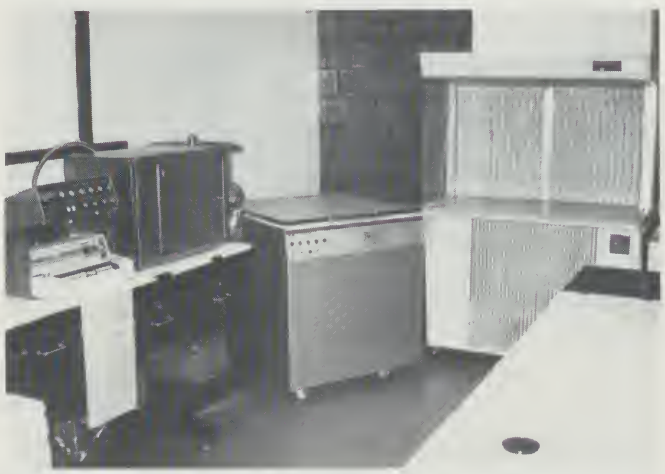


Figure 2. Tissue bank equipment (from left): computer and its controlled rate freezing chamber, liquid nitrogen tank (hidden by chamber), liquid nitrogen refrigerator, and laminar flow hood for tissue manipulation.

permission for this anatomic gift (Figure 3).

This early response allowed the skin bank to supply the needs of the Baltimore Regional Burn Center and the Shock Trauma Center since its opening, although with frequent difficulty. MTBL's experience has been similar to that of other tissue banks in two respects. First, the demand for allograft skin is always at least equal to and often greater than the bank's inventory. The need for donors to maintain the supply of tissue is constant. Second, the frequency of families granting permission for donation of tissue is directly related to prior knowledge of the ability to donate tissue and of the beneficial effects of the tissue for seriously burned and injured patients. The frequency of anatomic gifts is particularly high if tissue donation had been discussed within the family prior to the death of the potential donor. Thus, the importance of public education regarding the donation of organs and tissues for transplantation cannot be understated.

The public needs to understand that *any* individual who dies is a potential donor for tissues such as skin,

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CONSENT FORM FOR THE
GIFT OF BODY, ORGAN AND / OR TISSUE

DATE: _____

TIME: _____ a.m. p.m.

In accordance with the Maryland Anatomical Gift Act, I hereby give to the appropriate organ and tissue procurement agency (agencies):

☐ the body ☐ any needed organs or tissues ☐ tissue - skin ☐ the following organs or tissues, _____

of the decedent, _____, for the following purposes:

☐ any purpose authorized by law
☐ transplantation
☐ therapy
☐ medical research and education.

In documenting this anatomical gift, I certify that in relationship to the decedent I am a: ☐ surviving spouse; ☐ adult son or daughter; ☐ parent; ☐ adult brother or sister; ☐ person authorized or obligated to dispose of the decedent's body. I further certify that, to the best of my knowledge, I am not aware of any controversy among decedent's next of kin regarding the making of this anatomical gift.

I have read and fully understand this document.

Signed _____

Witness _____ Date _____

Witness _____ Date _____

Figure 3. Consent form for anatomic gift can be obtained by calling number at top.

corneas, and bone. Transplantable organs such as kidneys, hearts, heart-lung preparations, and livers must come from donors who have been declared brain dead but whose hearts still are beating. In contrast, tissues such as skin, bone, and corneas have a lower rate of metabolism than do blood-bearing organs. Since the individual cells of the body only begin to die when the heart stops, these tissues remain up to 80 percent viable for 24 hours or more after the individual's death.

Donation from certain potential donors is not requested because of the presence or the history of diseases such as cancer, hepatitis, or certain infections that would contraindicate use of the tissue. Similarly, tests are made of donor blood and tissue to rule out such conditions prior to clinical use.

The public has the misconception that donation of skin will deface the body, both literally and figuratively. Only very thin skin grafts (less than a millimeter thick) are removed from the trunk and the legs of the donor. No area visible in an open casket is used. Even in areas from which skin is obtained, most of the full thickness of skin remains on the body.

Most importantly, the public needs to realize the great benefits of these tissues for the injured. All the advantages enumerated by Zaroff in his 1966 article[4] are seen in both burn and nonburn traumatic wounds. In essence, the allograft skin acts like the patient's own skin graft and allows the wound to be closed temporarily. All the benefits of a closed wound are seen long before the wound normally would be closed. The body does not recognize the tissue as foreign until the tissue becomes vascularized about three days after application. Even then, the body cannot mount forces to reject the skin for two or three weeks. Since the biological dressing usually is removed by the end of the first week after application, rejection is not a problem.

Establishment of the MTBL has provided the well-recognized benefits of biologic dressings of allograft skin to the victims of burn and nonburn trauma in Maryland. The next article in this series will review some clinical situations in which human skin allograft is being applied.

References

1. Brown, J.B. *et al.* "Postmortem Homografts as 'Biological Dressings' for Extensive Burns and Denuded Areas." *Ann Surg* 138(1953):618.
2. Shuck, J.M. *et al.* "Homograft Skin for Wound Coverage." *Arch Surg* 98(1969):472.
3. Shuck, J.M. *et al.* "Homograft Skin for the Early Management of Difficult Wounds." *J Trauma* 12(1972):215.
4. Zaroff, L.I. *et al.* "Multiple Uses of Viable Cutaneous Homografts in the Burned Patient." *Surgery* 59(1966):369.

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Executive Committee and Council Actions

Executive Committee—October 24, 1985

• **Relationship between Med-Chi and MMLR** The appointment of Donald T. Lewers MD, Israel Weiner MD, and Elza Davis CAE to represent Med-Chi on the Board of Marylanders for Malpractice Liability Reform was ratified by motion without dissent. A motion was passed giving MMLR permission to use Med-Chi's telephones during nonworking hours for membership recruitment.

• **Nomination to Physician Review Committee of Blue Cross/Blue Shield** In response to Blue Cross/Blue Shield's request for a nominee for appointment to their Physician Review Committee, the Executive Committee approved the nomination of Clarence E. McWilliams MD, family practitioner.

• **Secretary of Health and Human Services** The Committee agreed to support the nomination of Otis R. Bowen MD of Indiana for the position of Secretary of the Department of Health and Human Services.

Executive Committee—November 21, 1985

• **Nominee for AMA ad hoc Committee on PRO** The name of J.D. Drinkard MD will be submitted to AMA to serve on this committee, which will report to the Council on Medical Service. Five physicians will be selected nationwide for this committee.

• **Medical Student Association Funds** An allocation of $500 in support of the Association's Third Annual Residency Planning Seminar was approved.

• **Elliott Fishel Memorial Fund** An appropriation of $150 for a donation to the Baltimore City Scholarship Fund in Dr. Fishel's memory was approved. This amount is to be matched by the attorney members of the Medicolegal Committee, contingent on the approval of the Bar Association.

Council—November 21, 1985

• **Lobbying for the 1986 Legislature** Donald T. Lewers MD, President-elect, has consented to work full time during the 1986 legislative session as one of the Faculty lobbyists.

• **Relationship between MMLR and Med-Chi** Council accepted recommendations contained in a letter from Elza Davis to William H. Finney MD outlining the relationship between the two groups. It will remain a loose, cooperative arrangement with an exchange of Faculty members to MMLR Board and MMLR Board members to Med-Chi's Legislative Committee.

• **Request from Medicolegal Committee** Council approved, without dissent, an Authorization and Assignment Form, which will be published.

• **Blue Cross/Blue Shield Medicare Demonstration Project** Council adopted, without dissent, the following motion:

> The Council shall create a strong statement of opposition to the demonstration project and that the position be given at the scheduled hearings to the Maryland Hospital Association, the Office on Aging, AARP (American Association of Retired Persons), Representative Barbara Mikulski and all interested parties.

Dr. Dembo volunteered to testify at the hearing in Baltimore City.

Acting Executive Director: Elza Davis

Last October Elza Stanley Davis was appointed Acting Executive Director by the Executive Committee of the Faculty. No stranger to Med-Chi, she has been here as Communications Director since 1975. Along with her public relations functions, she is a registered lobbyist for the Faculty spending a large portion of her time in Annapolis during the Legislative Session each year.

During the past summer she received the Certified Association Executive certificate indicating competence in the field of Association management and allowing her to use the initials CAE after her name.

Davis received her BA degree from the University of Akron, Ohio. Associations to which she belongs include the Maryland Society of Association Executives, where she served as secretary 1980-83, Vice-President 1983-84, President-elect 1984-85, and President 1985-86; the American Association of Medical Society Executives; the Baltimore Public Relations Council; and the American Lung Association, Maryland Affiliate, Public Relations Chair, 1981-82; Institute for Organization Management, Northeast Board of Regents.

Leadership of the Faculty began a planning process in early February. A search committee will be formed to seek a permanent Executive Director.

Medical Miscellany

Accreditation Manuals

The Joint Commission on Accreditation of Hospitals (JCAH) has announced publication of the 1986 edition of the *Accreditation Manual for Hospitals*. The *Manual*, effective for accreditation decision purposes on January 1, 1986, has been completely revised into an outline format. A numbering system for all standards and required characteristics and a new five-point rating scale make the *Accreditation Manual for Hospitals* an excellent self-assessment tool for hospitals and will allow surveyors to use the *Manual* as the survey report form.

Because the *Manual* will serve as a self-assessment tool, JCAH will discontinue publication of the *Hospital Survey Profile*. The *Manual* also includes important new and revised chapters: an entirely new "Rehabilitation Service" chapter, governing standards pertinent to multihospital systems and corporately structured hospitals, and revisions to the "Medical Staff" chapter.

To order the 1986 *Accreditation Manual for Hospitals*, send $50 per copy to: Cashier, JCAH, 875 North Michigan Avenue, Chicago, IL 60611. For further information regarding this or any JCAH publication, contact Customer Service at JCAH, 312-642-6061.

Hosts Needed for International High School Students

Host families are being sought for 25 high school students for the school year 1986–87, in a program sponsored by American Intercultural Student Exchange (AISE). Students come from Sweden, Norway, Denmark, Finland, Germany, France, Switzerland, Holland, Belgium, Spain, Italy, Equador, Brazil, Japan, and Australia.

The students (ages 15 to 18) arrive in the US in August 1986 and return to their own countries in June 1987. They attend local high schools while living with their American hosts. All students have been screened thoroughly in their home countries, are fluent in English, and have spending money and medical insurance.

Host families with small children are welcome to participate in this program. Host families may deduct $50 a month for income tax purposes.

AISE also is seeking American High school students (ages 15 to 17) to participate in either a school year or five-week summer stay in a foreign country.

Families interested in either program should contact the following address as soon as possible. Letters should contain the prospective host family's phone number.

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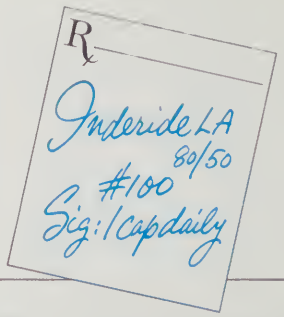
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INDERIDE LA is indicated in the management of hypertension.

This fixed-combination drug is not indicated for initial therapy of hypertension. If the fixed combination represents the dose titrated to the individual patient's needs, therapy with the fixed combination may be more convenient than with the separate components.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL®):
Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide:
Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL®):
CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patients should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide:
Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL®):
GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide:
GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance: namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL®):
Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia, congestive heart failure; intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:
Gastrointestinal: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis, sialadenitis.

Central Nervous System: Dizziness, vertigo, paresthesias, headache, xanthopsia.

Hematologic: Leukopenia, agranulocytosis; thrombocytopenia, aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura, photosensitivity; rash; urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis); fever, respiratory distress, including pneumonitis, anaphylactic reactions.

Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm; weakness, restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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BALANCED CALCIUM CHANNEL BLOCKADE!



Low incidence of side effects
CARDIZEM® (diltiazem HCl) produces an incidence of adverse reactions not greater than that reported with placebo therapy, thus contributing to the patient's sense of well-being.

*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study.[1]

Increases exercise tolerance*
In Bruce exercise test,[2] control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P<.005$).

CARDIZEM®
(diltiazem HCl)

THE BALANCED CALCIUM CHANNEL BLOCKER

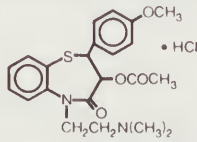
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cardizem®
(diltiazem HCl)
30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral/LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

Issued 4/1/84

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Letter to the Editor

Maryland State Guard

I would like your readers to know their State needs them. Under the new "one force" concept, the Maryland National Guard is considered part of the Army, not just a backup force. In a national emergency, local National Guard units are subject to being federalized and shipped out of the area in less than two weeks time. Should that happen, there will be a great need for someone to fill the void left by the National Guard. Picture a major natural or man-made disaster with no National Guard to save lives and protect property.

A new military organization under the direction of the Governor and the Adjutant General of Maryland is being organized to replace the National Guard if the National Guard is called to federal service. The new organization also can supplement the National Guard during emergencies declared by the Governor. Until this organization is called to duty by the Governor, its members serve as unpaid volunteers. If activated, members would draw the same salaries as their regular Army ranks would earn.

This new organization, the Maryland State Guard, has units that meet at all Maryland armories. Members include college professors, ministers, engineers, businessmen, high school students, housewives, and a wide variety of other indivduals. They serve because they believe that the State Guard is an interesting and worthwhile way to serve their communities.

The State Guard especially needs physicians willing to serve as Battalion and Brigade Surgeons. We recognize that physicians are busy people, and we realize that the idea of serving in an unpaid capacity (until activated) is not especially appealing. However, the need is real. We hope that among your readers there are a few men and women who will answer this challenge. Prior military service is not required, and ages 16 to 75 are eligible. Individuals with physical problems are eligible so long as they are able to perform their jobs.

Contact: *COL. CHARLES KRATZ*
MD State Guard
5th Regiment Armory
Baltimore, MD 21201
301-728-3388

or *LT. ELYIS C. JONES*
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Frostburg, MD 21532
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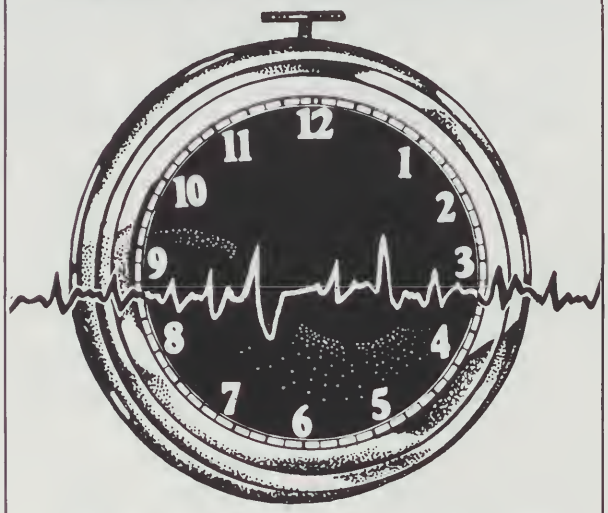
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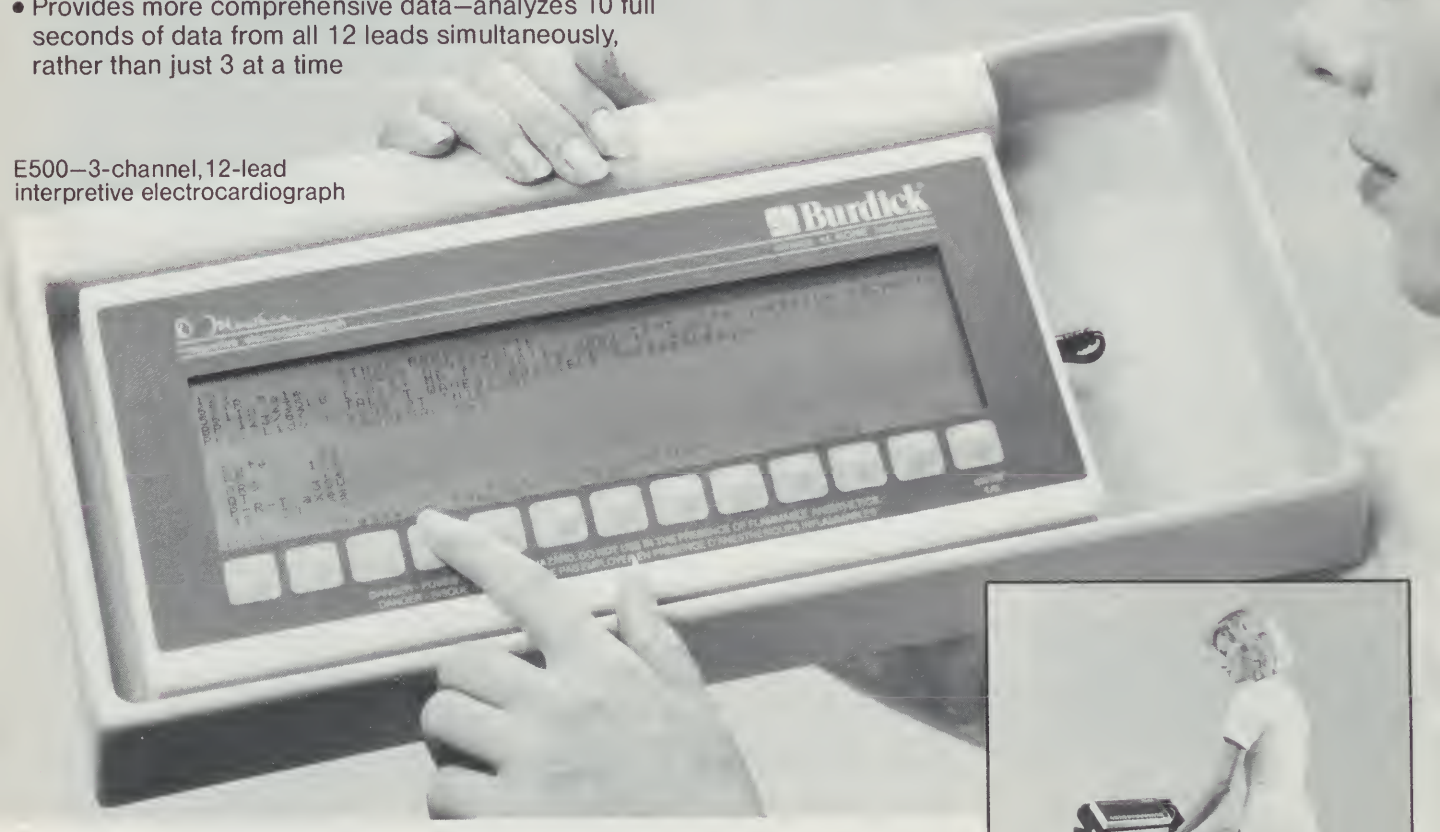
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Med-Chi members reading papers before organizations, are invited to submit their papers to the MMJ for consideration for publications.

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Manuscripts may be sent to Editor *MMJ*, 1211 Cathedral St., Baltimore, MD 21201. Articles are accepted for publication on the condition that they are contributed solely to this journal. Transmittal letters should designate one author as correspondent and include his/her address and telephone number. Manuscripts are reviewed by the editor, editorial board members, and guest reviewers. The final decision is reserved for the Editor.

Specifications

Manuscripts must be original typed copy, double-spaced throughout (including text, case reports, legends, tables, and references) with margins of at least one inch. Number pages consecutively. Please submit two additional copies.

Include in the manuscript the concise title, full name of the author (or authors) with highest degree, academic and professional titles, affiliations, and any institutional or other credits.

An introductory synopsis/abstract of approximately 100–150 words is required.

Tables are to be typed on separate sheets ot paper, numbered, and have a brief descriptive title. The Editor reserves the right to edit tables. Be sure that statistics are consistent in both tables and text.

References are limited to those citations noted in the text. References are to be typed double-spaced and numbered consecutively as they appear in text. They will be examined critically at the time of review and must be kept to a minimum. The number of references is generally limited to 20 in major contributions and fewer in shorter articles. Exceptions may be made if appropriate in the opinion of the reviewing editor. Personal communications and unpublished data should not be included. The following are necessary: names of all authors, complete title of article cited (lower case), name of journal abbreviated according to *Index Medicus*, volume number, first and last page numbers, and year of publication. For more extenisve information about preparing medical articles for publication, the editors suggest the International Committee of Medical Journal Editors: Uniform requirements for manuscripts submitted to biomedical journals. The complete document is available in the June 1982 issue of the *Annals of Internal Medicine*.

Illustrations are material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper. *Omit illustrations that do not increase understanding of text, and limit them to a reasonable number.* Four or fewer illustrations should be adequate for a manuscript of 4 to 5 typed pages. Legends are to be typed on a separate sheet of paper. Type on a gummed label and affix to the back of each illustration: figure number, title of manuscript, name of senior author, and arrow indicating top. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs and drawings. *Cost of printing color* photographs must be borne by the author.

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Galley proofs will be mailed to the principal author and, if not returned by the specified date, will be considered approved as typeset.

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As the largest provider of long-term nursing care in Maryland, Meridian Healthcare is in a unique position to exercise some leadership in developing new techniques for caring for Alzheimer victims. Even more important, we have made a commitment to actively assist with the search for a cure for this serious, terminal condition.

A specialty Alzheimer Disease Care Unit has been created at Meridian Nursing Center—Heritage in consultation with The Johns Hopkins University Medical Institutions to develop innovative approaches to care. To advance this research, Meridian funds an Alzheimer Disease Research Fellowship in The Johns Hopkins University Department of Psychiatry.

Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

Our concern with Alzheimer Disease is only one of many ways Meridian Healthcare is different. For more detailed information on our Alzheimer program or on any of our 13 Nursing Centers in Maryland, call or send the coupon for our free *Referrer's Guide*.

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Discipline Commission Action

Re: Dorothy M. Cothran MD

On May 7, 1985 the Commission on Medical Discipline entered into a nonpublished agreement with Dorothy M. Cothran MD that canceled the Emergency Suspension of her medical license ratified by the Commission on October 9, 1984.

As of May 7, 1985 Dr. Dorothy M. Cothran was restored to the practice of medicine with full privileges. The unpublished agreement in this case allows Dr. Cothran the right to prescribe medication under the Commission's scrutiny and subjects her to continuing peer review.

AVON J. BELLAMY, **Executive Director**
Commission on Medical Discipline
October 4, 1985

• • •

In the Matter of Moe M. Myint MD Before the Commission on Medical Discipline

Order for Emergency Suspension of License

Background

On or about June 4, 1985, the Commission on Medical Discipline of Maryland (the "Commission") received a Complaint from Patricia Carrington, Executive Director of the Department of Health and Mental Hygiene Board of Medical Examiners, which stated that Moe M. Myint MD (the "Respondent") had been released from active duty. Attached to the Complaint were certified copies of the proceedings leading to the Respondent's release from active duty by the United States Air Force.

Exhibit 1 indicates that on April 12, 1984, Respondent appeared before a Credentials Hearing Committee of the United States Air Force, for a hearing on whether Respondent's privileges would be defined, and whether Respondent should be released from active duty if defined privileges were not granted. The finding of the Credentials Hearing Committee was that Respondent be separated from active duty.

Findings of Fact

Specifically, based on information provided the Commission as set forth above, as well as the information described below, the Commission makes the following findings that:

1. Respondent is a physician licensed to practice in the State of Maryland;

2. Respondent came to the attention of the Commission on June 4, 1985 as a result of a Complaint filed by Patricia Carrington, Executive Director of the Department of Health and Mental Hygiene Board of Medical Examiners;

3. The Complaint was based upon a communication from Charles R. Young, Maj., USAF, MSG, to the effect that Respondent had been separated from active duty with the United States Air Force on August 31, 1984 as a result of her professional conduct;

4. The report of Charles R. Young was accompanied by certified copies of the record of Respondent's proceedings before the Credentials Hearing Committee of the United States Air Force (Exhibit 1, pp. 12–17) which determined that the Respondent be separated from active duty.

5. The findings of the Credentials Hearing Committee as set forth in the transcript are:

a. That Respondent has trouble coping with some of the complex surgical cases, specifically those involving complex pediatric, cardiac vascular cases, and class III or IV anesthesia cases.

b. That Respondent has problems handling cases involving multiple decisions.

c. That Respondent would be granted privileges for routine anesthesia cases but would have to have continued and constant supervision for complex pediatric, cardiac vascular cases, and class III and IV anesthesia cases.

d. That Respondent could not receive full certification.

e. That Respondent be removed from active duty.

6. Based on the foregoing findings, the Commission has reason to believe that Respondent is in violation of the Annotated Code of Maryland, Health-Occupations, §14-504(4), in that she is professionally, physically, or mentally incompetent, and (22) in that she has been disciplined by a licensing or disciplinary authority for acts that would be grounds for disciplinary action under this section.

7. The Commission concludes that for reasons set forth in the foregoing paragraphs, emergency action is required in this case pursuant to State Government Article, §10-405, Annotated Code of Maryland (the Administrative Procedure Act) because in light of Respondent's professional incompetence, her continued possession of a license to practice medicine poses an imminent and grave danger to the public health, welfare, and safety.

Order

It is this 15th day of October 1985 by the Commission on Medical Discipline of Maryland:

ORDERED that pursuant to the authority vested in the Commission by the State Government Article, §10-405 of the Annotated Code of Maryland, Respondent's license to practice medicine is hereby SUMMARILY SUSPENDED; and it is further

ORDERED that on presentation of this Order, Re-

On instruction of the Council of the Medical and Chirurgical Faculty of the State of Maryland, "Findings of Fact, Conclusions of Law, and Order" will be published in the Maryland Medical Journal.

spondent shall immediately deliver to the Commission

1. Her complete license to practice medicine in the State of Maryland, and

2. All permits issued to her to prescribe controlled dangerous substances, and it is further

ORDERED that a hearing shall be held before the Commission within thirty (30) days of the date on which the Commission receives a request from the Respondent for a hearing to consider this emergency suspension.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline of Maryland

• • •

In the Matter of George Vash MD Before the Commission on Medical Discipline

Order for Emergency Suspension of Medical License

Based on information received from the Division of Drug Control and the Peer Review Committee of the Medical and Chirurgical Faculty of the State of Maryland regarding the medical practice of George Vash MD (the "Respondent"), the Commission on Medical Discipline (the "Commission") makes the following Findings of Fact, Conclusion of Law and Order.

Findings of Fact

Based on all information known and available to it the Commission knows or has reason to believe that:

1. Respondent is a physician licensed to practice medicine in the State of Maryland;

2. Respondent came to the attention of the Commission as a result of reports from the Division of Drug Control, the Department of Health and Mental Hygiene (the "Division") which indicated inappropriate prescribing practices;

3. On January 15, 1977, Respondent's Drug Enforcement Administration (DEA) registration number required for prescribing controlled dangerous substances expired;

4. Respondent has prescribed controlled dangerous substances such as valium, doriden, percocet, darvocet, ativan, and preludin, since January 15, 1977;

5. The Division forwarded to the Commission prescription surveys from several pharmacies that demonstrated prescriptions written by Respondent;

6. The Division forwarded to the Commission a computer print-out from the Medical Assistance Administration indicating prescriptions paid for during the period February to May 1985, all of which were prescribed by Respondent;

7. Pursuant to the provisions of Health Occupations Article §14-501 the Commission referred the complaint and supporting documents to the Medical Chirurgical Faculty of Maryland for investigation (Med-Chi);

8. The case was referred to the Committee on Drugs (the Committee) for investigation; . . .

12. The Committee subpoenaed six (6) patients records of Respondent and met with the Respondent on August 13, 1985;

13. The Committee's report of August 15, 1985 indicated that:

a. Respondent's patient records are inadequate and deficient insofar as they are completely unintelligible, therefore making it impossible to determine, from the records, whether Respondent is prescribing legend drugs for a valid medical purpose;

b. Respondent is unable to fully comprehend what is being said to him or the meaning of medical questions being asked of him;

c. Respondent cannot remember what has been communicated to him and cannot remember what he has communicated to others;

d. Respondent's responses to statements and questions were often nonsequiturs;

e. Respondent does not comprehend the danger of overuse and use of controlled dangerous substances;

f. Respondent does not know the medical indications for prescribing controlled dangerous substances;

g. Respondent is unable to distinguish between the pharmaceutical properties and the treatment effects of different controlled dangerous substances;

h. Respondent lacks medical judgment to make a proper medical diagnosis and to follow through with a proper medical treatment plan.

i. The Committee informed the Respondent that it believed that his license should be immediately revoked and he should immediately vacate his office;

j. Respondent informed the Committee that he would comply with its recommendations immediately but Respondent immediately reopened his office the next day and continues to practice; and

k. Respondent is a danger to his patients and the community insofar as he is mentally, physically, and professionally incompetent.

14. The prescription surveys and computer print-out indicate that Respondent is inappropriately prescribing controlled dangerous substances and is endangering both his patients and also the public by prescribing inordinately large quantities of controlled dangerous substances to the same individuals in a short period of time.

Conclusion of Law

Based on the foregoing facts, the Commission finds that the public health, safety, and welfare imperatively requires emergency action in this case, pursuant to State Government Article, §10-405(b), Annotated Code of Maryland.

Order

It is the 29th day of August 1985 by the Commission

of Medical Discipline:

ORDERED that pursuant to the authority vested in the Commission by State Law Article, §10-405 of the Annotated Code of Maryland, Respondent's license to practice medicine is hereby SUMMARILY SUSPENDED; and be it further

ORDERED that Respondent IMMEDIATELY CEASE the practice of medicine; and be it further

ORDERED that on presentation of this Order, Respondent shall immediately deliver to the Commission

1. His complete license to practice medicine in the State of Maryland; and

2. All permits to prescribe controlled dangerous substances that are issued to Respondent; and be it further

ORDERED that a hearing to consider this emergency suspension shall be held before the Commission within thirty (30) days of the date on which the Commission receives a written request for such a hearing from the Respondent.

KARL F. MECH **MD, Executive Secretary**
Commission on Medical Discipline

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Feb 20–21 What Will We Do with the Sex Offender: Medical and Legal Issues. Fee: $225; 16 AMA Cat I credits.

Feb 24–25 Applied Ethics: Caring for the Mentally Impaired Elderly. Fee: two days $150; one day $100. Appropriate credits applied for. Info: P. Macedonia 301-955-6085.

Feb 27–Mar 1 Symposium on Dysphagia. Hours of instruction: 17.

Mar 3–5 Obesity and Other Eating Disorders. Hours of instruction: 20.

Mar 6–7 Asbestos. Hours of instruction to be announced.

Mar 10–12 Spectrum of Developmental Disabilities VIII. Issues of Diagnosis, Evaluation, Habilitation, and Research of the Preschool and School Age Child with Developmental Disabilities: Fee: $290; 20 AMA Cat I credits; 20 Cat A credits for Psychologists; 2.0 CEUs.

Mar 13–14 Brain Receptors: Images and Ideas. Hours of instruction: 15.

Mar 14 Ocular Histoplasmosis Syndrome. Columbia, Maryland. Hours of instruction: 8.

Mar 21 Computers in Ophthalmology. Hours of instruction to be announced.

Mar 22–23 Hemodynamic Monitoring/Patient Care and Pulmonary Artery Catheterization. Hours of instruction: 12.5.

Mar 24–26 Critical Care Medicine. Hours of instruction: 24.

Apr 3–4 Diagnosis and Treatment of Neoplastic Disorders. Hours of instruction: 45.

Apr 7–12 Pediatric Trends 1986. Fee: $500; 45 AMA and 45 PREP credits. Info. Course Coordinator 301-955-5880.

Apr 14–15 *In Vitro* Toxicology—Approaches to Validation. Fee: $225 before Mar 1, $275 thereafter; 15 AMA Cat I credits and 1.5 CEU pending. Info: J. Ryan 301-955-6046.

Apr 28–30 Interventional Radiology and DSA. Fee $325 physicians; $175 residents, nurses, technologists; 25 AMA Cat I credits; ECE by ASRT. Info: C. Kearney 301-955-3168.

May 2–3 The Developing Heart. Fee: $75. Info: C. Kearney 301-955-6046.

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/86. Info: J. Mosmiller 301-955-8450.

Basic Practicum Mar 10–14, May 19–23, Aug 11–15, Sep 22–26, Nov 17–21. Fee: $460; 40 AMA Cat I credits.

Advanced Obstetrics & Gynecology Feb 26–28, Apr 23–25, Nov 5–7. Fee: $325, 24 AMA Cat I credits.

Visiting Physicians offered weekly throughout the year for experience in the lab and participation in reading sessions. By appointment. Fee: $460; 40 AMA Cat I credits.

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Thursdays–Jan 16 through May 1, 4–5 p.m. Reproductive Endocrinology Lecture Series. 1 AMA Cat I credit; 1 cognate per session, Formal Learning, ACOG. Info: 301-955-3355.

Diagnostic Cytopathology for Pathologists, 1986 Postgraduate Institute: February to May 1986, subspecialty residency in Clinical Cytopathology, compressed into 152 AMA Cat I credits in two courses, both of which must be taken:

Feb—Apr—Home Study Course A, personal reading and microscopic study in own laboratory and

Apr 28—May 9—In-residence Course B, concentrated lecture series, laboratory study, and clinical experience at the Johns Hopkins Medical Institutions, Baltimore, MD, USA.

Application and completed preregistration is advised ASAP: completed preregistration must be done **before March 28, 1986,** unless by special arrangement. Info: John K. Frost MD, 604 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA.

• • •

University of Maryland School of Medicine

CME Courses: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Mar 21–22 Second Annual University of Maryland Contact Lens Symposium. Hyatt Regency, Baltimore. Fee: $160 for early registration: 12.5 AMA Cat I credits.

Apr 3–4 CO_2 Laser for Otolaryngologists and

Allied Specialties. University of Maryland School of Medicine, Baltimore. Fee: $675; 12.75 AMA Cat I credits.

Apr 11 Lung Cancer Update. The Belvedere Hotel, Baltimore.

Oct thru May—Visiting Practitioner Preceptorship Program. Acceptance on approval of Departments. Hour-for-hour AMA Cat I credit.

All Year Departmental Rounds and Conferences. Held weekly by clinical departments. Hour-for-hour AMA Cat I credits.

Sep thru Jun—Visiting Professor Program— Lecturer/Topic directory available to hospitals and other health care organizations. An administrative fee is charged. Call for further information.

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Miscellaneous Meetings

Feb 20 Managing the Business Side, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Feb 21 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management in Philadelphia, PA. Info: 312-645-4958

Feb 21–23 1986 Annual Meeting and Scientific Session Virginia Chapter, AAP and The Virginia Pediatric Society, Williamsburg Conference Center, Colonial Williamsburg, VA. CME designation: 12 PREP hours and 15 AMA Cat I hours. Info: 804-643-8130.

Feb 26 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

Feb 27 Managing the Business Side, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

Feb 28—Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

March 5, 12, 19 Psychoanalytic Perspectives on Ulcerative Colitis at the Baltimore-DC Psychoanalytic Institute, 821 N. Charles St., Baltimore. First in a series of presentations on Classical Psychosomatic Disorders. 8–9:30 p.m.; 4.5 AMA Cat I credits for program. Mar 5: Review of Important Literature; Mar 12: Implications for Medical Management; Mar 19: Participants opportunity to discuss cases. Info/registration 301-727-1740.

Mar 19 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Baltimore. Info: 312-645-4958.

Mar 20 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Baltimore. Info: 312-645-4958.

Mar 21 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Baltimore. Info: 312-645-4958.

Mar 24–26 Prevention of Venous Thrombosis and Pulmonary Embolism, an NIH Consensus Development Conference, Masur Auditorium, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info: M. Dillon, Prospect Assoc., 2115 E. Jefferson St., Suite 401, Rockville, MD 20852 (301-468-6555).

Apr 9 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Apr 10 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Apr 11 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Apr 25–26 Computer Applications, An Introductory Workshop, College Park, MD, sponsored by the American College of Obstetricians and Gynecologists. Fee: $360 nonfellow. Info: R. Murray 202-638-5577 ext. 343.

Apr 30 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Washington, DC. Info: 312-645-4958.

May 1 Managing the Business Side, conducted by AMA's Department of Practice Management, in Washington, DC. Info: 312-645-4958.

May 7 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

May 8 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Pittsburgh, PA., Info: 312-645-4958.

May 8–10 Alumni Crab Feast, University of Maryland School of Medicine, 7–10 p.m. Students Common, MSTF. Info: J. Thompson 301-528-7454.

May 9 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

May 10 Alumni Reception and Dinner Dance, at the Sheraton Inner Harbor, University of Maryland School of Medicine, Info: J. Thompson 301-528-7454.

May 15–18 Virginia Society of Otolaryngology—HNS Annual Meeting, Wintergreen Resort, Wintergreen, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

May 27–31 Fifteenth Annual SCCM Educational and Scientific Symposium, Washington, DC. Fee: Nonmember physicians $375, nurses and therapists $270, member physicians $275, nurses and therapists $225; approx 40 Cat I credits. Info: T. Schultz 714-870-5243.

May 29–Jun 1 The Virginia Society of Ophthalmology Annual Meeting, The Omni International, Norfolk, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

Jun 25 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

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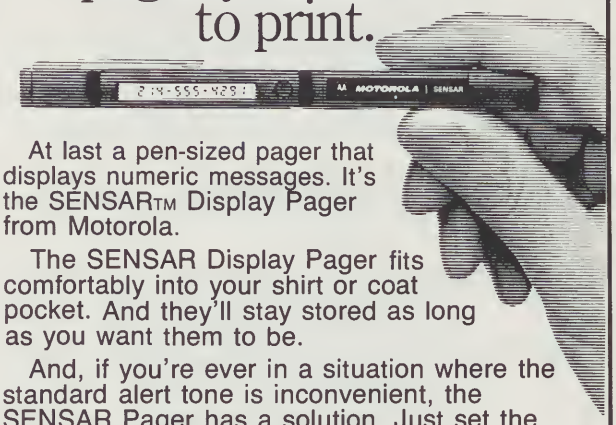
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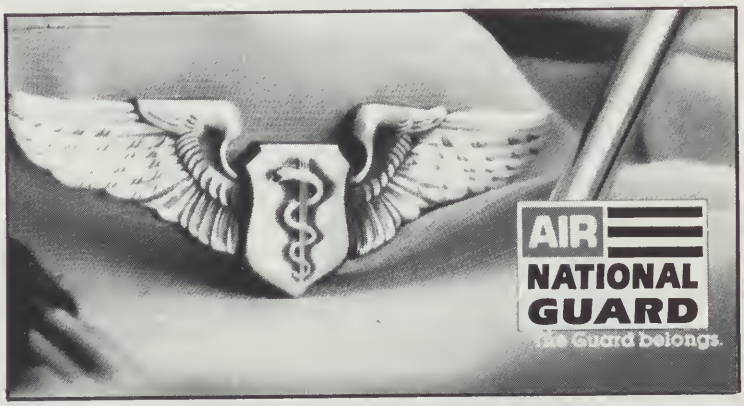
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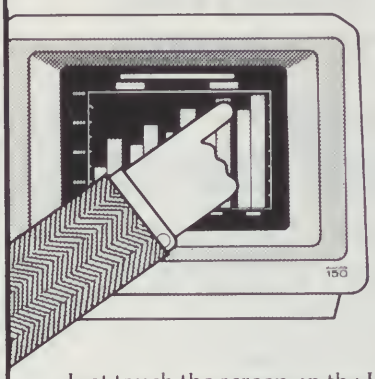
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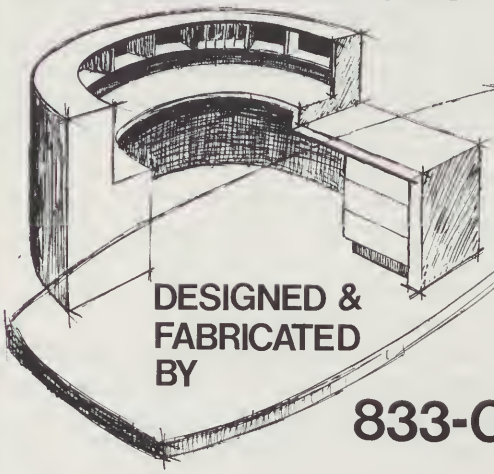
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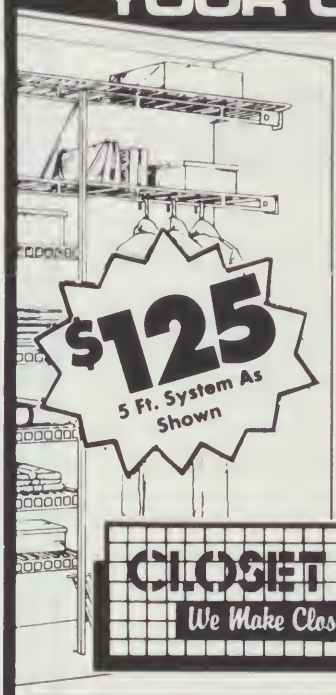
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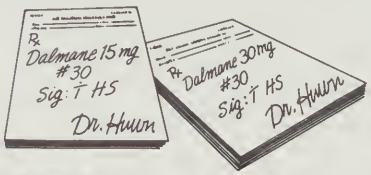
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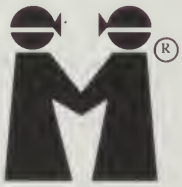
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On the cover. Dr. Kelly's guest book, found at a Baltimore book sale, contains hundreds of names from all over the world and gives ample evidence of his interests and concerns. Article begins on page 175.

The views in this publication are those of the authors and do not necessarily reflect the opinion of the Medical and Chirurgical Faculty of the State of Maryland.



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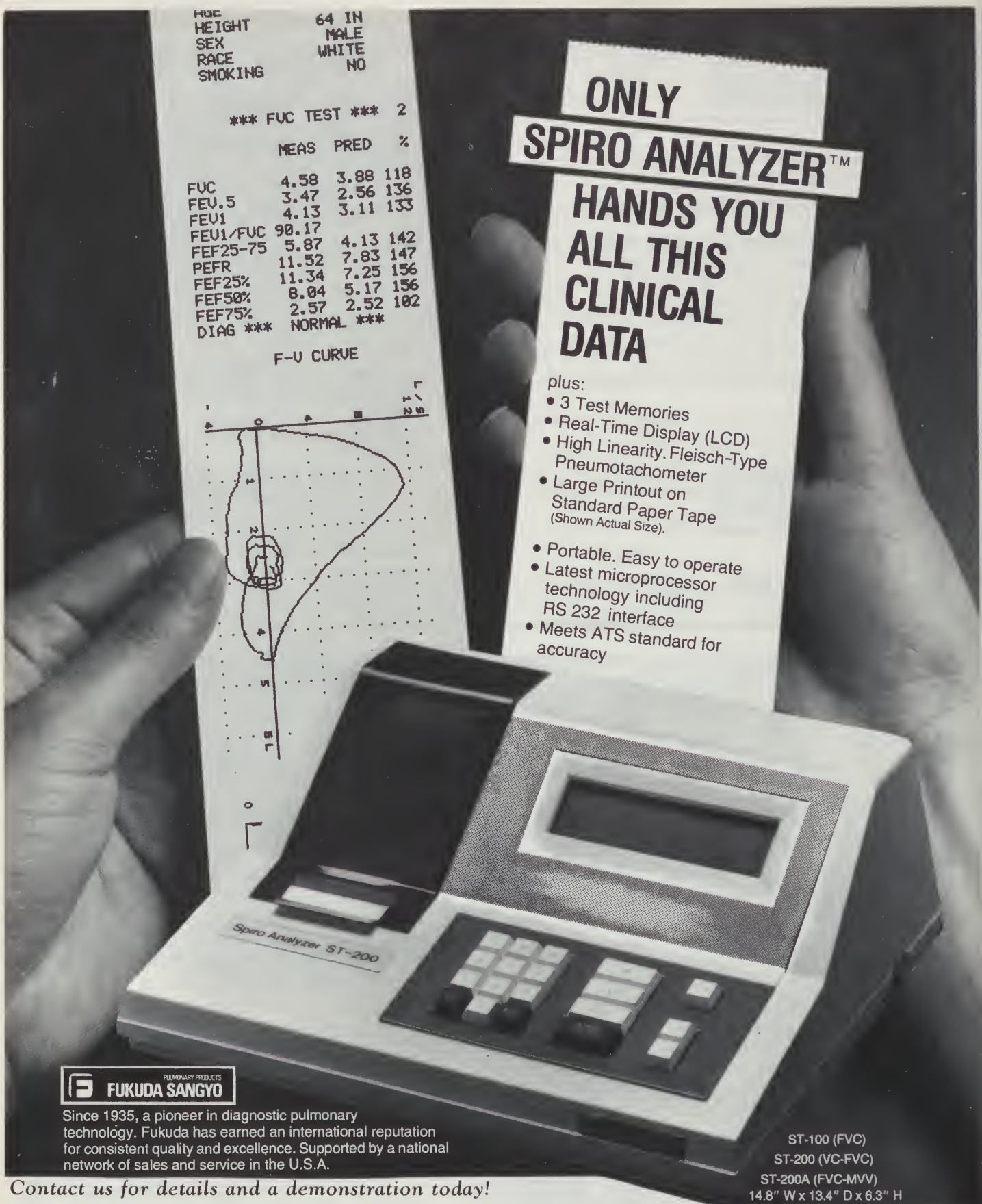
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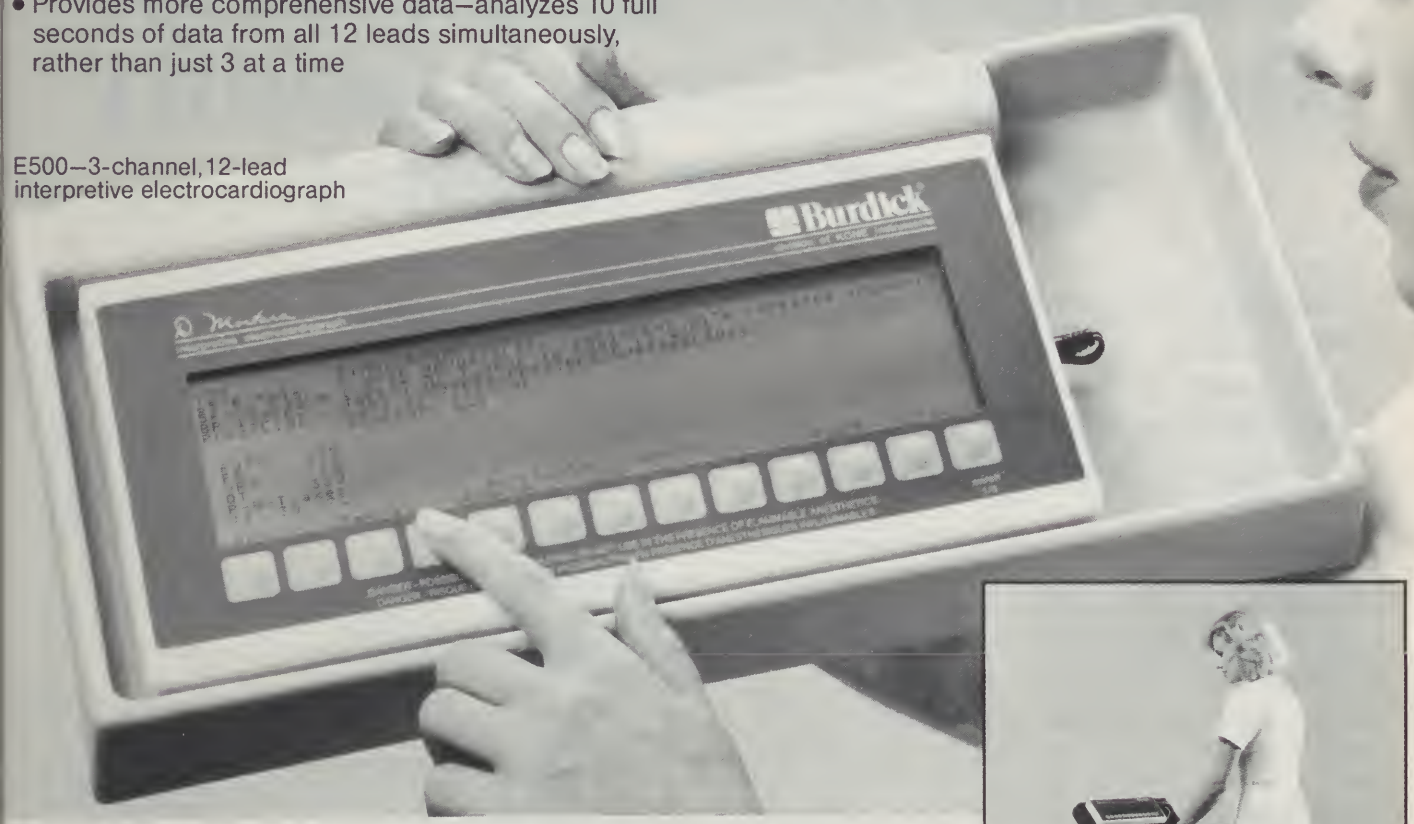

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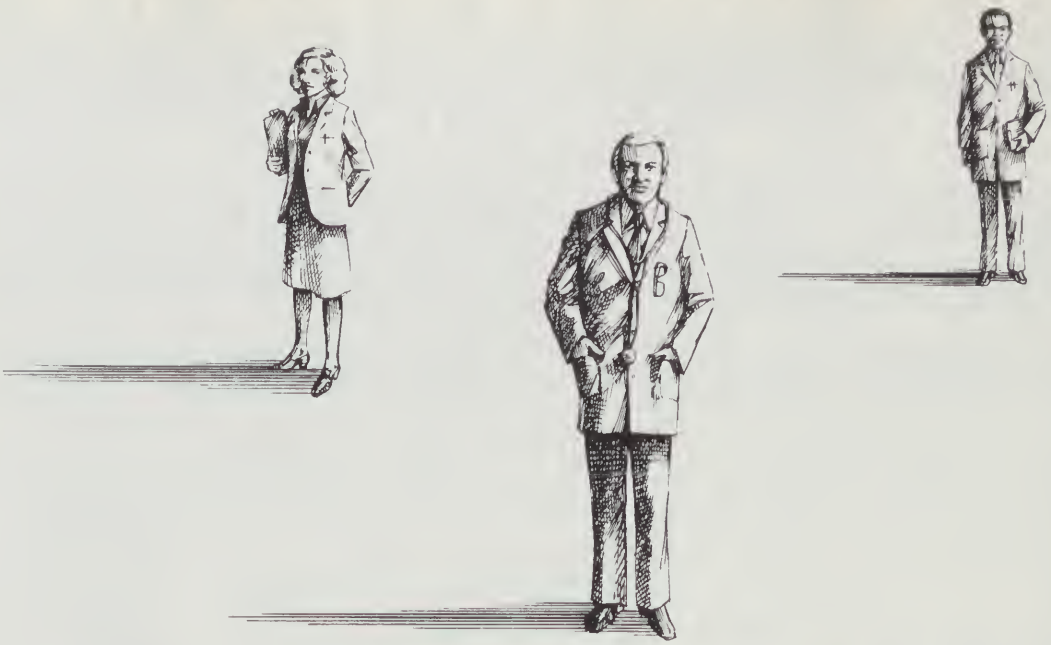
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Executive Director's Newsletter

March 1986

PROFESSIONAL LIABILITY LEGISLATION

Hearings have been held in both House and Senate on the majority of bills dealing with this issue. At this writing, Senate measures have been considered by the full Senate with the House still waiting to act. It is likely the two sides will present very different approaches to the problem. The Senate already has modified the major piece of legislation to deal only with medical malpractice instead of the original application to liability issues in all areas. These differences will be resolved in conference committee near the end of the legislative session, which occurs on April 7 this year.

A favorable outcome can be achieved only if legislators are convinced that the medical profession is united in its support of reform measures and are prepared, in return, to accept a more comprehensive and efficient system of peer review. If you have not written or called your individual legislators yet, PLEASE DO SO NOW. Express your support for a cap on noneconomic loss of $250,000, change in the collateral source rule, and structured payments (HB 728 and SB 558). Be sure to mention that the medical community strongly supports the peer review and risk-management proposals in the Governor's package (HB 727 and SB 560). Streamlining the Health Claims Arbitration system, HB 726 and SB 559, also should be supported.

Please ask you patients and your friends to support our efforts by calling and writing legislators. Each Faculty member received a legislative directory earlier in the year. Additional copies are available from the Faculty office.

BOARD OF MEDICAL EXAMINERS

The Board of Medical Examiners will hold its April meeting during the Med-Chi Annual Meeting on Thursday, April 17, 1986 at 2 p.m. in Room 314 of the Baltimore Convention Center. All members of the Medical and Chirurgical Faculty are invited to this open meeting.

Election of members of the Board of Medical Examiners will be held during the General Membership Meeting following the House of Delegates meeting at approximately 11:30 a.m., Wednesday, April 16, 1986 in Room 321 of the Convention Center.

RESOLUTIONS

No resolutions were received in the Faculty office by Friday, February 21, 1986, the deadline for receipt of resolutions. Therefore, there will be no Reference Committee meeting and no report presented to the House of Delegates at the Annual Meeting on April 18.

PHOTO CONTEST

You are invited to submit black-and-white and color photographs to the Sixth Annual Med-Chi Photo Contest. Deadline date for submission is April 4, 1986. More details are on page 174.

1986 DUES BILLS

In January, second-notice dues bills were sent as reminders to members who had not at that time paid their dues. If you received a notice after mailing your check, please disregard it.

If you have not received your 1986 dues bills, please call the Membership Department at the Faculty office, 301-539-0872 or toll free 800-492-1056.

GUIDELINES: DISABILITY/ IMPAIRMENT EVALUATION

Council approved guidelines and their distribution in whatever manner the Occupational Health Committee deems appropriate. The guidelines will be submitted to the Workers' Compensation Commission for review and comment prior to publishing in the Maryland Medical Journal.

ANNUAL MEETING

The theme of the 1986 Annual Meeting, "THE AMERICAN HEALTH CARE REVOLUTION" will be addressed in the Plenary Session by the Keynote Speaker, Edward N. Brandt, Jr., MD, Chancellor, University of Maryland at Baltimore. Dr. Brandt will discuss "What Should Physicians Be Doing." Richard J. Davidson, President, Maryland Hospital Association, will speak on "The Future Ain't What It Used To Be," and "Major Trends" will be addressed by Carl Sardegna, President and Chief Executive Officer, Blue Cross and Blue Shield of Maryland. Plenary Session will be held at the Baltimore Convention Center, Wednesday, April 16, from 4 to 6 p.m.

CPT BOOK AVAILABLE

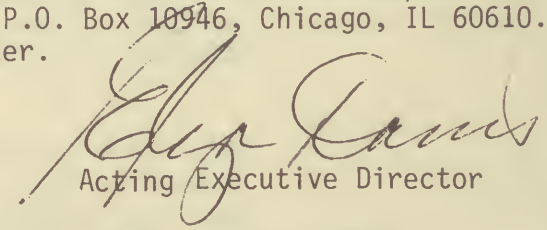
The 1986 edition of the Current Procedure Terminology Book (CPT) is available through Med-Chi. Price is $30 and checks must be made payable to the Med-Chi Library. Please send check in advance with "CPT Order" written on envelope. Book will be mailed the day your check is received.

AMA FUTURE MEETINGS

	Annual Meeting	Interim Meeting
1986	June 15-19, Chicago	December 7-10, Las Vegas
1987	June 21-25, Chicago	December 6-9, Atlanta
1988	June 26-30, Chicago	December 4-7, Dallas
1989	June 18-22, Chicago	
1990	June 10-14, Chicago	

NEW PUBLICATION

Medical Practice Finance: A Guide for Physicians recently published by the AMA is designed to inform physicians about various financing alternatives and to guide them through the financing process. It is available to state, county, and specialty medical societies and AMA members for $9.95 per copy; nonmembers for $14.95. Order from Book & Pamphlet Fulfillment, OP-233, AMA, P.O. Box 10946, Chicago, IL 60610. Payment must accompany order.

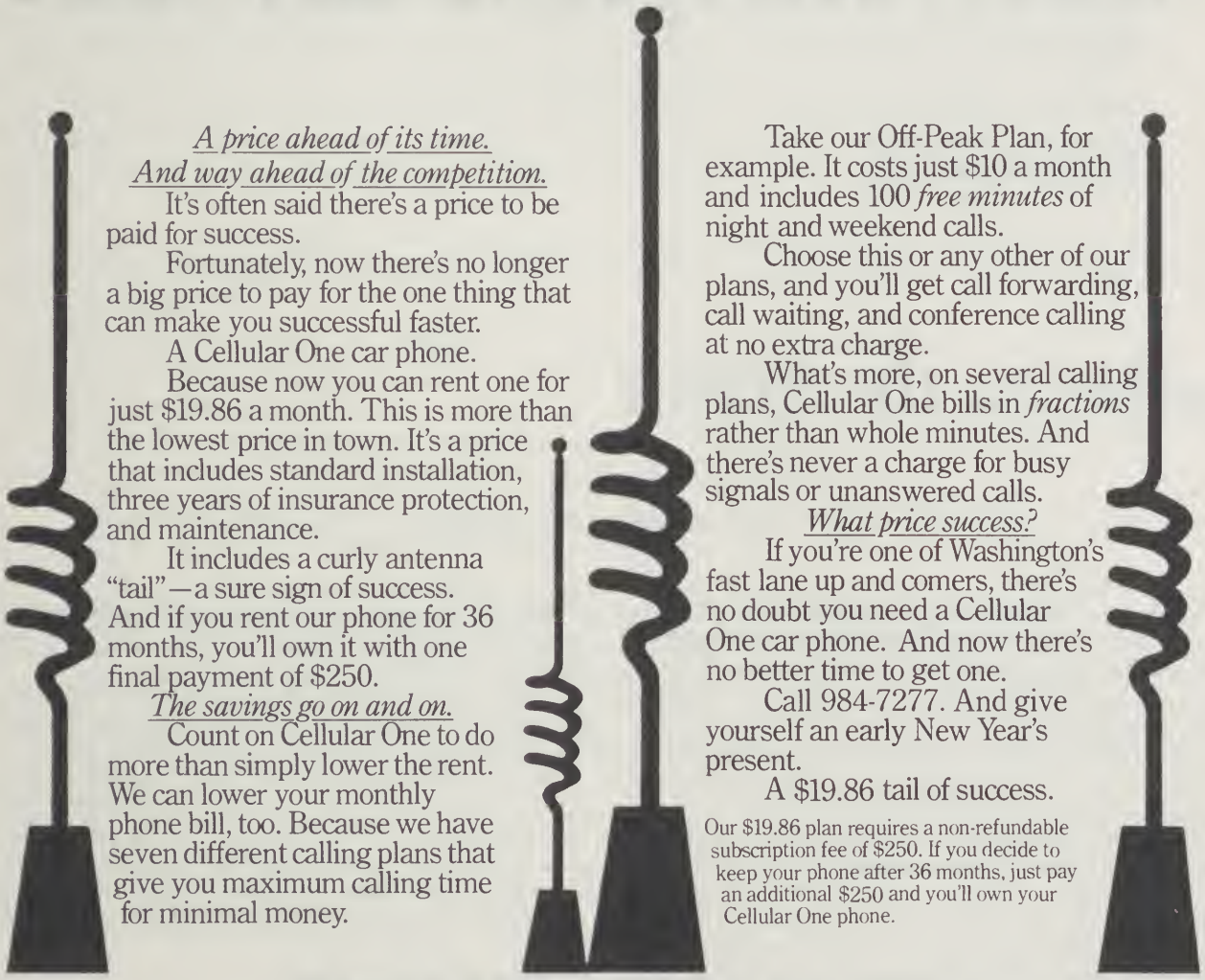


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Our Voice Becomes Much Louder When it is Silent

Jack Sargeant passed away in November 1985 having served our medical profession for over a quarter of a century. I was fortunate to have met him when he first arrived to Maryland. I also was privileged to be his friend for the greater part of his stewardship.

I choose not to dwell on the sadness of the untimely death of Jack, for eternity is not for us. Death is universal; it is even necessary. I choose instead to speak of his legacy, for the legacy we leave behind defies death and transcends time.

Jack Sargeant's accomplishments are a matter of record. The ever-changing and very challenging problems of our profession in the last two decades were legion, but fortunately they were confronted at the top by a diligent and skillful problem solver. He seldom had a precedent to go by or guidelines to follow. He needed to be, and he was, imaginative, creative, dedicated, and driven by the faith of a pioneer.

His dedication and loyalty to us never deterred him from being critical. He was courageous in speaking his mind and in pointing out to us what he believed to be our shortcomings. He was the voice of our conscience.

Happy are those who, through their passing by in the world, leave the world a bit better. Jack Sargeant left all of us a bit better.

Worry not about us, Jack, for we have your legacy. You will remain effective after death.

Our steps reach their highest in cadence when we become still.

GEORGE S. MALOUF **MD**
Immediate Past President

Letter to the Editor

John Sargeant Remembered

I have just received the December 1985 *Maryland Medical Journal* and I was most interested to see what was written regarding John Sargeant, his fatal illness, and more importantly, his accomplishments during his years with Med Chi . . . .

Some years ago when the local hospital in the town in which I live was in danger of closing because of an irreconcilable rift between Board and staff, I along with several staff members went to Baltimore to seek help. Several of the then officials of Med Chi turned us down for the most inept reasons, but John got on the phone and worked in our behalf for 5 to 6 hours extending into the late evening. Finally we succeeded in contacting two physicians who turned out to be of excellent caliber and would undertake the job of arbitration.

It was John's suggestion as to who to contact for this task, and without him, I believe we would have failed. This episode taught me that John had compassion, was willing to go above and beyond the call, and was a diplomat of the first order.

I am sure that there are many members of Med Chi who can cite innumerable instances of John's help and expertise, which most times went unsung.

It is my considered opinion that Med Chi never had anyone like him before he came to us and that we will not find anyone to completely "fill his shoes" in the future. Without doubt, he was Mr. Med Chi 100 percent.

In any event, this country boy knows when we have lost a fine, outstanding friend of the medical profession.

G. BROOKS WEST, Jr., **MD**
Cambridge, Maryland

Send letters to Editor, ***MMJ****, 1211 Cathedral Street, Baltimore, MD 21201. We reserve the right to edit all submissions as necessary for clarity and conciseness.*

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

MEMORIAL RESOLUTION

JOHN SARGEANT CAE

Introduced by Maryland Delegation

Whereas, John Sargeant, the first Executive Director of the Medical and Chirurgical Faculty of the State of Maryland, died November 25, 1985 at age sixty-five; and

Whereas, Mr. Sargeant, for over twenty-five years an extraordinary leader in medical matters in Maryland, originated many projects that gained legislative approval, including the concept of a separate disciplinary body for physicians in which the profession itself plays a significant part; and

Whereas, Mr. Sargeant served the Faculty uniquely, both as Chief Executive Officer and Chief Lobbyist, setting an example of credibility, integrity and efficiency which was admired by all members of the State Legislature and Congressional delegation with whom he came in contact; and

Whereas, Mr. Sargeant was instrumental in the establishment of Faculty committees to work with local and state agencies, thereby setting models of cooperation between private and public organizations; and

Whereas, Mr. Sargeant, as a health advocate and opinion-maker, had a true sensitivity to the needs of both his constituency and the community, and was known throughout Maryland as "the physicians' doctor"; and

Whereas, Mr. Sargeant inspired and encouraged both his physician members and staff to seek excellence in their careers by setting a personal example of excellence; and

Whereas, Mr. Sargeant was sensitive to the concerns of his employees and friends and was always available for consultation and/or advice; and

Whereas, Mr. Sargeant was an affiliate of the American Medical Association and a member of the American Association of Medical Society Executives, served on the Advisory Board to the American Medical Association's Executive Vice President (1977–1981), as well as the AMA's Public Relations Advisory Committee, among other voluntary services; therefore be it

RESOLVED, That the House of Delegates of the American Medical Association express to John Sargeant's widow, Jeanne, and to his family, its respect and deep sorrow for the loss of a valued colleague.

December 1985

Members in the News

James J.H. Carey MD, chief of the Division of Nephrology and assistant chairman of the Department of Medicine at St. Agnes Hospital, assumed the position of president of the St. Agnes Hospital Medical Staff for 1986, after serving one year as president-elect.

Dr. Carey received his bachelor of arts degree from Yale University in 1955. He then served as an aviator with the U.S. Navy for three years and held the rank of Lieutenant. He received his medical degree from The Johns Hopkins University School of Medicine in 1966. He served his intership, residency, and fellowship in nephrology at Georgetown University Hospital, Washington, DC.

He holds professional appointments with Maryland General Hospital, Mercy Hospital, Howard County Hospital, and Louis J. Kolodner Dialysis Unit.

• • •

Salvatore R. Donohue MD, Senior Vice-President for Medical Affairs at Maryland General Hospital, was given the Ameritan Award by the Order of the Sons of Italy in Maryland. Dr. Donohue was cited for his "outstanding accomplishment and achievement and exemplary performance in public and private endeavors." The Ameritan Award is given annually to an individual of Italian-American heritage who has distinguished himself in his personal and professional life.

William C. Gray MD has been elected president of The Maryland Society of Otolaryngology-Head and Neck Surgery. Dr. Gray, a surgeon and member of the Division of Otolaryngology in the Medical System is also an associate professor, Division of Otolaryngology, Department of Surgery, University of Maryland School of Medicine.

Dr. Gray graduated with distinction from The George Washington University School of Medicine, and served a one-year residency in surgery and a residency in otolaryngology at The University of Maryland Hospital.

• • •

John Shutta MD, an instructor in the department of family medicine, University of Maryland School of Medicine, received the Parke-Davis Teacher Development Award. He was one of 12 family physicians selected from an eligible national pool of more than 5,000 for the $1,400 stipend. The money supports Dr. Shutta as a part-time teacher of medical students and family practice residents at the UM School of Medicine. He also has a private family practice in Walkersville, Maryland. A 1982 graduate of the University of Maryland School of Medicine, Dr. Shutta was UM's chief resident of family practice in 1985.

Medical Miscellany

Photo Contest

Med-Chi's Annual Photo Contest is once again in progress. All members of the Faculty and its Auxiliary (except professional photographers) are invited to enter an original photo for this year's judging.

An exhibit of all competing photos will be on display April 16 and 17 at the 1986 Annual Meeting. Contest winners will be announced at the Meeting. Prizes will be awarded the First and Second Place winners in both the Black & White and Color categories.

To be included in this year's judging, photos must be mailed or brought to the Medical and Chirurgical Faculty office at 1211 Cathedral Street, Baltimore, Maryland 21201 by 5 p.m. FRIDAY, APRIL 4, 1986. Photos WILL NOT be returned by mail but may be claimed at the exhibit area on the morning of FRIDAY, APRIL 18. Any photos not collected at that time will be available at the Faculty office thereafter.

Full contest rules may be found on page 174 in this issue. Anyone needing more information should contact Diane Sakwa at Med-Chi (in Baltimore 539-0872 or, toll-free in Maryland, 1-800-492-1056).

First Annual Media Awards Program

Information has been sent to Maryland and Washington, DC news media announcing the Medical and Chirurgical Faculty of Maryland First Annual Media Awards Program, to honor excellence in communicating health information to the public.

The program has three categories: Television, Radio, and Print. The entry in each category selected by the judges as the most outstanding will receive a plaque and a cash donation to the charity of the winner's choice.

Entries will be judged by a panel including two representatives from the publishing and broadcast fields, the editors of the *Maryland Medical Journal*, and two physicians. Awards will be presented at the Annual Meeting in April 1986.

If you would like more details about the program, call Nina Casey at the Faculty office in Baltimore 539-0872, or toll free in Maryland, 1-800-492-1056.

Executive Committee and Council Actions

Executive Committee—December 14, 1985
Conference Call

• **Malpractice Crisis Committee** The Committee, led by Barry Wolk MD, notified three Maryland hospitals they will no longer deliver Medicaid patients or supervise hospital deliveries done by house staff. Following this announcement of job action, Elza Davis CAE spoke with Dr. Wolk and offered to meet with him, members of his group, and members of the Executive Committee prior to any Annapolis meeting. He refused.

Dr. Donald T. Lewers moved that the Faculty adopt a strong statement that the Faculty is not in support of this job action, and further, that although we understand the frustration of the physicians facing the withdrawal of another major insurer (General Accident) and the increasing premium costs for malpractice insurance, the withdrawal of obstetrical services from the poor cannot be supported. The motion passed unanimously as did a motion that the Faculty urge MMLR to make a similar statement and to support the Faculty's position.

Executive Committee—December 19, 1985

• **House of Delegates Minutes** Minutes of the House of Delegates' meeting September 28, 1985 were approved as distributed.

• **Physicians' Pharmaceutical Services** John Grad, Esq, and Michael Roberts were present to ask the Committee to consider three things:

- to discontinue disapproving of physician dispensing
- to consider economic issues of physician dispensing
- to develop guidelines for physician dispensing

After discussion, the Executive Committee decided to send the section of the Physician/Pharmacist Code of Cooperation to the Professional Ethics Committee for consideration and recommendation.

• **Physicians' Union** Dr. Bernard S. Karpers described the organizational meeting of the Union of American Physicians and Dentists, held December 16, which he attended as an observer. He suggested to the group assembled that each should contact the representative of the Med-Chi Hospital Medical Staff Committee located in each physician's hospital regarding specific problem areas and potential for resolution outside unionization.

• **Medical Advisory Board MVA** The following nominees were approved for submission for service on this Board:

Charles A. Judge MD, Prince Frederick
James F. McMurry, Jr., MD, Bethesda
John H. Weigel MD, Prince Frederick
Jose M. Presbitero MD, Glen Burnie

• **Public Image/Malpractice Campaign** The Committee was informed of disposition of funds for this campaign; $84,000 have been received to date from the voluntary assessment.

• **Directory of Physician Fees** House Counsel Judith Wood reported the directory of physicians (including their fees) published by the Attorney-General's office should be available shortly.

• **AMA Leadership Conference 1986** The Committee declined to furnish funds to send a medical student and resident to this year's conference.

• **Montgomery County Medical Society Billing** Joseph Harrison and Hal Frye reported that 750 members renewed membership or joined the Montgomery County Medical Society under the pilot project, and that, as of November 30, $277,000 have been collected.

• **Fee Review Activities** Montgomery County Medical Society has been dropped from the appeal in the Ratino case regarding fee reviews. County medical societies that have discontinued fee reviews will be notified of the progress and encouraged to resume this activity.

• **Blue Cross/Blue Shield Medicare Project** A letter written by the Faculty to the Governor regarding the pilot project was distributed. Michael Murray reported on the hearings. A report will be submitted to the Governor by the agencies that conducted the hearings: Department of Health and Mental Hygiene, Office of Aging, and the Insurance Commissioner.

• **Intercept, Inc.** The Committee received a newspaper clipping on this group which supplies physicians with names of persons who have filed malpractice actions. A memo from Judith Wood, Esp, Faculty Legal Counsel, regarding the termination of the physician/patient relationship was shared with the Committee.

• **Citizens for Democratic Action Organization** The Committee approved contribution of $100 to this group to help purchase food for poor families. Med-Chi is to remain anonymous.

Executive Committee—January 9, 1986

• **1986 Budget** The 1986 proposed budget was accepted as presented and forwarded to Council for approval. For the seventh consecutive year, no dues increase is being requested.

• **New Building** Joseph Harrison reported that funds collected to date for the new building total approximately $1,160,000; at least $2,000,000 will be needed. Staff was instructed to examine the feasibility of erecting a parking garage on the site of the parking lot.

A motion requesting an assessment of $200 be submitted to Council for approval and recommendation to the House of Delegates in April was passed unanimously.

• **Blue Cross/Blue Shield** A letter from Governor Hughes to Dr. J.D. Drinkard in response to the Faculty position on the Medicare Demonstration Project was distributed.

Baltimore City Medical Society

President Gary Rosenberg MD presided over BCMS's Annual Meeting on December 6. Visiting guests included J. Donald Drinkard MD, president of Med-Chi; J. David Nagel MD, Baltimore County Medical Association president; Leon Kassel MD, Med-Chi Council chairman; Ms. Elza Davis CAE, Med-Chi Acting Executive Director, and Joseph Harrison, Med-Chi Associate Executive Director.

Past President Raymond Atkins MD reviewed the career of Elliott Fishel MD, and gave a splendid eulogy of his brother surgeon. Dr. Fishel was president of BCMS when his sudden death shocked us all. He was one of 25 members who died during the year. They were honored by a period of silence by all present. Mrs. Fishel and their son received a special memorial to him. Larry Fishel announced that an annual scholarship will be set up through the BCMS Foundation in Dr. Fishel's name.

Paul Bormel MD, for the BCMS Foundation, in honor of the deceased members, announced the awarding of scholarships to Baltimore City students of medicine. These are Beverly Banks, at Hopkins; Karen Dembeck at Virginia; Michael Lobos at St. Louis; and Letitia Short at Harvard.

A new feature was the presentation of medallions to living past presidents: Everett S. Diggs, 1960; R. Carmichael Tilghman, 1962; D. Frank Kaltreider, Jr., 1968; John N. Classen, 1970; Philip F. Wagley, 1971; Edward F. Cotter, 1972; John B. DeHoff, 1974; Ian R. Anderson, 1977; Roland T. Smoot, 1978; Albert M. Antlitz, 1979; Henry N. Wagner, Jr., 1980; Leon Kassel, 1981; Karl Weaver, 1982; Kennard Yaffe, 1983; Raymond Atkins, 1984; and Elliott Fishel, 1985.

Officers and the nominating committee for 1986 were duly elected. President Rosenberg introduced the other officers for next year. President-elect Jose Yosuico MD, Vice-president Susan Guarnieri MD, Secretary Hiroshi Nakazawa MD, and Treasurer Paul Bormel MD. New to the Board of Directors are Joseph Berman MD, Albert Nahum MD, and Israel Weiner MD. New councillors are Mack Bonner MD, John H. Mulholland MD, Gary Rosenberg MD, and to complete Raymond Atkins MD's unexpired term, Vincent Fitzpatrick MD.

Concluding, President Rosenberg exhorted all members to stand up to the challenges facing medicine today. All members must get in and work—not sit back and expect their elected officers to do it all. He reminded us of the major problems we face: continuing education, malpractice, tort reform, insurance costs, and most particularly our physician image in the public eye.

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Insurance Monitor

For more information or answers to your insurance questions, contact your insurance representative.

Proposed Tort Reform Legislation

Senator Orrin Hatch (R. Utah) has proposed legislation that would provide monetary incentives to states that adopt specified tort reform measures. The legislation, endorsed by the American Medical Association, includes periodic payment of damage awards over $100,000, elimination of the collateral source rule, limitation of attorney's contingency fees, and a $250,000 limit on awards for noneconomic damages.

• • •

Lawyers Face Insurance Increases

Professional liability insurance premiums for attorneys in New York are increasing an average of 400 percent, with premiums for some firms increasing as much as 1,200 percent. The New York State Bar Association has formed a Task Force to "determine the fairness and justification of the higher rates," and Task Force chairman Thomas A. Harnett announced that the group may propose legislative changes in the civil justice system and in methods for rating and pricing liability insurance.

Trial Lawyers Oppose Tort Reform

In New York, the state trial lawyers' association has begun a $5 million fund drive to defeat proposed medical malpractice tort reform measures in the state legislature. The lawyers have named their campaign "The Coalition for Consumer Rights," and say their goal is to protect the public's right to sue.

• • •

Chicago Malpractice Verdicts Increase

According to the *Cook County Jury Verdict Reporter*, more than $83.2 million was awarded in the Chicago metropolitan area last year. This figure was more than the total awards paid in all of the preceeding 14 years.

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Commentary

The Second Opinion

A second opinion is a consultation under special circumstances either to (1) corroborate the first opinion or (2) offer options. The second opinion contributes to the peace of mind of the patient and family and also shares the responsibility of the primary physician, making it easier for him/her to deal with the problem at hand. There should be no objections to the request for a second opinion for nearly always the effort made by the primary physician is more appreciated.

The second opinion consultation can be accomplished in one of two ways: the most desirable and least costly is with the knowledge and assistance of the physician rendering the first opinion. In this case, the data already assembled would be provided to the physician rendering the second opinion. Alternatively, the second opinion could be provided independent of the primary physician, in which case the person rendering the second opinion would take a history, do a physical examination, and obtain any additional information and tests he/she needs to render a valid and responsible opinion. In these days of concern about the cost of medical care, overuse of all forms of the consultation process contributes to the escalation of medical costs.

A consultation is indicated when it is in the best interests of the patient to have one. The perception of either the physician or the patient (and family) should follow the guidance "do not hesitate to call in a specialist for consultation if you think that a specialist's knowledge and service are necessary." From the physician's vantage there are three indications:

- When the diagnosis is not clear
- When the patient is not doing well, and
- When it is important to spread the responsibility for the decision being made.

Who is qualified to provide the consultation? To answer this question, one must examine what the patient needs from the consultant. A patient with advanced malignancy who has failed in all treatment has different needs than a preoperative review. Highly specialized physicians and surgeons, those with unique procedure skills, or physicians who through experience and an analytical type of mind have been found (by peers) over the years to aid in the resolution of complex clinical problems are useful. The person you would select for your own family is probably the best choice.

The consultant should be called by the primary physician, who outlines the problem and provides the background; sometimes the family may prefer to contact the consultant directly. A less satisfactory way to request a consultation is to write an order or to delegate to a third party to arrange a consultation.

In arranging a consultation, first prepare the patient. It is disconcerting to the consultant when the patient asks, "Who are you?" "I didn't ask for you," "I have my doctor," or "Who is going to pay you?"

A consultant should greet the patient, state why he/she is there, and indicate the problem that he/she has been asked to help resolve. The consultant usually will have gone over the record so that at the bedside he/she can ask additional, appropriate questions. After doing a pertinent historical and physical examination, the consultant writes a legible and fairly concise opinion, directed toward a resolution of the problem for which he/she was engaged. The consultant's opinion should focus most often on a single area, carefully weighing the expense and problems of additional testing.

When the consultation is complete, the consultant should communicate by phone or in person with the attending physician in a timely fashion. It is an obligation of consultation to get in touch with the referring physician and on all except the most routine reviews to initiate some form of two-way contact. He/she also can communicate with the patient a reasonable explanation or say that he/she would like to talk to the attending physician so that a combined explanation can be given. Sometimes it is best to delegate the presentation of the combined opinion or divergent opinions to the attending physician, who, it is understood, knows the patient much better. When the consultant disagrees with a diagnosis or course of action, he/she is obligated to discuss this with the attending physician. Almost always a reasonable plan of action acceptable to both can be determined. If there is an impasse, a second consultant may be in order. The consultant can provide in various situations:

1. A clinical opinion if this is all that is requested
2. Advice in the daily care with repeated visits
3. Write orders if indicated
4. Accept the patient in transfer
5. Arrange special tests or procedures and assist in their interpretation
6. Teach the patient how to accept his/her condition.

Above all, the consultant must have a store of knowledge that will be beneficial to the attending doctor and to the patient. He/she should be able to fit apparently disjointed details into a significant pattern and to communicate this in a manner of greatest benefit to the patient.

I am one who believes that a second opinion, as does a consultation, improves the practice of medicine; however, overuse is to be deplored.

In this presentation, the terms consultation and sec-

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ond opinion have been used interchangeably although in certain recent financial coverage plans, emphasis has been placed on the term "Second Opinion." This pertains to a list of *surgical procedures* for which the third-party payors will not be responsible unless there is a supportive second opinion. Time will tell whether this reduces costs by eliminating unnecessary surgery or simply postpones the procedure while increasing costs.

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Med-Chi Photo Contest Rules

Eligibility

All members of the Faculty and members of the Auxiliary to the Medical and Chirurgical Faculty may enter. Professional photographers may not enter. Members of the Photo Contest Committee and their families are not eligible.

Contest Rules

1. Photographs may be submitted in two categories—BLACK and WHITE or COLOR.
2. Limit: three entires per person.
3. Entries must have name, address, and telephone number attached to the back of each photograph.
4. PRINTS only, no smaller than 8 × 10 or larger than 11 × 14, will be accepted. If your favorite shot is a slide, you must have a print made to enter in the contest within these size ranges.
5. Entries may be mailed or brought to the Faculty Office, 1211 Cathedral Street, Baltimore, Maryland 21201 by the close of the business day on April 4, 1986.
6. Entries MUST be matted or dry mounted. No framed photographs will be accepted.
7. Photographs entered in the contest will be on display at the Annual Meeting in April of 1986.
8. Winners will be announced at the Annual Meeting of the Medical and Chirurgical Faculty, April 16 thru 18, 1986.
9. Photographs will NOT be mailed back. Photographs may be claimed at the exhibit area at the close of the Annual Meeting on Friday, April 18 at noon or at the Faculty Building thereafter.
10. The Faculty does not guarantee against loss or damage of any kind to the photographs submitted to the contest.
11. Prizes will be awarded to the FIRST and SECOND place winners.

The Library Page

Gleanings from a Physician's Guest Book

A few days before Christmas 1942, six Johns Hopkins medical students gathered in the large library at the rear of the 1406 Eutaw Place residence of Howard A. Kelly MD for late afternoon tea and Bible study. The scene had been a frequent occurrence in the home for nearly fifty years. Conversation inevitably drifted from discussion of their current studies to what it might mean to be a doctor and a Christian. None of those present considered the possibility that this was to be the last of such sessions. However, Audrey W. Davis, Dr. Kelly's close friend and assistant (and later biographer) later noted that after these students had left, Dr. Kelly "looked about slowly, and as he walked to the door he turned and said, 'What a happy life I have had here.'" A few days later Dr. Kelly was admitted to Union Memorial Hospital, where he died on January 12, 1943.

The signatures of the six students are the last entries in a tattered book I discovered at a Baltimore book sale several years ago. The covers were missing and the book was in sad shape. What grabbed my attention was the familiar signature of Howard A. Kelly at the top of the first page. It was followed by the autographs of Dr. Kelly's wife Laetitia and several of their children. At the top of the page was the date 20 Feb. 1935.

About two thirds of the book was blank. The first third of the book consisted of signatures, grouped by dates and often accompanied by the name of a city or town, sometimes with an address. On the second page of the book I discovered the signatures of William T. Howard, a name I recognized as that of a former president of Med-Chi and author of *Public Health in Baltimore*. Further down the page was the signature of Fielding H. Garrison, the author of *History of Medicine* and *A Medical Bibliography*. On the third page was the signature of Ida S. Scudder, with the address: Woman's Medical College, Vellore So India. A couple of months earlier I had read Dorothy Wilson's biography, *Dr. Ida*, so the name and details of the life of this founder of the Christian Medical College and Nurses's Training School and of the Woman's Medical College in India were quite familiar.

Persevering, I found the remains of the book's front cover, a chipped piece of stamped leather loosely attached to some padding and a board. Stamped in gold in the center of the leather: Howard A. Kelly 20 February 1935. Attached to the board was a letter addressed to Dr. Kelly, "Friend and Christian Brother." The letter was from the Pocket Testament League, congratulating Dr. Kelly on the occasion of his seventy-seventh birthday and presenting him with the book as a token of appreciation for his regular attendance on Fridays. The letter carried forty-eight signatures.

Medical and Chirurgical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian

The letter, combined with information I gleaned from Miss Davis' *Dr. Kelly of Hopkins* helped me determine that my book sale find had served as Dr. Kelly's guest book for the last eight years of his life. At first I was excited by the discovery of signatures of familiar names like Grant Ward MD, Houston Everett MD, Thomas Cullen MD, and John T. King MD. At a meeting of the Baltimore Bibliophiles, I was able to tell my friend Dr. Huntington Williams that I had discovered where he was and what he was doing on the evening of February 10, 1936.

On October 17, 1935, nineteen-year-old George William Murgatroyd, Jr. and twenty-year-old Edward L. Suarez-Murias visited Dr. Kelly in his study. Eight years later both young men graduated from the Johns Hopkins Medical School. Today, Dr. Murgatroyd, an internist, and Dr. Suarez-Murias, a psychiatrist, practice within a couple of blocks of each other in downtown Baltimore.

The many pages of autographs give ample evidence of the wide variety of Dr. Kelly's interests and concerns.



Medical missionaries from countries all over the world visited and obtained support from him. On the page for January 8, 1937 is the signature of Dr. Tom Lambie and his wife. The had relinguished their U.S. citizenship to set up and run a hospital in Ethiopia. Dr. Lambie also had served as medical adviser to Haile Selassie. After Italy invaded and annexed Ethiopia, Dr. Lambie became literally a man without a country. Within a few pages are the signatures of Edith G. Dreyer of the China Inland Mission; Dr. and Mrs. Tinsley Smith Jr. from the Congo Belge, Africa; Dr. E.C. Cort from the McCormick Hospital in Siam; Mrs. William J. Breidinger from the Ivory Coast of Africa; and Harry Strachan from Costa Rica.

In July 1935 Madame Tatiana Tchernavin, author of *Escape from the Soviets*, was a guest in the Kelly home. Her book had won Dr. Kelly's sympathy for the Russian exiles, and he purchased many copies as gifts for his friends. The following January, Kelly arranged for Madame Tchernavin to return to Baltimore for a lecture at Goucher College. The guest book indicates that on each occasion guests were invited to meet the author for afternoon tea in the library. Davis' biography indicates that the friends "hung spellbound on her stories of life in Russia."

The guest book covers the period when the Great Depression was at its strongest. In paging through the book, one notices frequent gatherings in the library of Baltimore City Public School Principals. Rosabel Hall, the Chief Attendance Officer of the school system had brought to Dr. Kelly's attention the plight of great numbers of school children, who were coming to school unfed and with inadequate clothing and shoes. In response, Dr. Kelly invited Hall and the school principals to gather at his library on the first Friday of every month. At each session, Dr. Kelly turned over to the group $750 to use to help meet the needs of their children. Dr. Kelly campaigned among his friends and patients for donations of food and clothing, which were given to the principals to distribute. Dr. Kelly also set up an account at a Baltimore shoe store. When a child needed shoes, a principal would give the child a note to take to the shoe store for a new pair; a monthly bill was sent to Dr. Kelly. Davis reported that this activity alone cost Dr. Kelly several hundred dollars a month. The first such meeting of the principals, according to the guest book occurred on March 27, 1935. The last one was on December 4, 1942, just a month before Dr. Kelly died.

A final note concerning the medical students that gathered at Dr. Kelly's library on that day in December 1942. I have been able to trace three of them. Merel H. Harmel, who graduated the following spring, went on to specialize in surgery, and then in anesthesiology, doing a postdoctoral internship and residency at Hopkins. He is now Chairman of the Department of Anesthesiology at the Duke University Medical Center in Durham, North Carolina. Ess A. White, Jr. and Watts R. Webb both graduated in 1945. Dr. Webb became a thoracic surgeon and is now the Chairman of the Department of Surgery at the Tulane University Medical School in New Orleans, Louisiana. Dr. White is a psychiatrist at the Austin Riggs Center in Stockbridge, Massachusetts.

• • •

Occasionally over the past several years I have used this column to talk about collecting medical books and to describe various items I have acquired. All too often when I discuss book collecting with physicians, the concern centers on price, value, and return on investment. The Kelly guest book is a great example of the limitations of these concerns. When the manager at the book sale saw the condition of the guest book, it was given to me at no charge. I did not cheat them in accepting the gift. The item's monetary value is quite small. There is no way, however, that I can put a price on the fun the book provides me, studying and researching the names, trying to determine who people were, why they were there, and where they are now. In her biography of Dr. Kelly, Davis noted he always was concerned lest his ability to purchase any rare book he wished should spoil the fun of collecting. This little item associated with Dr. Kelly, that cost me nothing, has given me as much enjoyment as the most expensive book in my collection. And whenever I choose I can go back to it. There are still hundreds of names there that I haven't researched. Eventually, I intend for this "priceless" treasure to go to the Chesney Archives at Johns Hopkins, where it will join hundreds of other items associated with Dr. Kelly.

JOSEPH E. JENSEN
Librarian

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during December 1985.

	No. of Citations
1. Antisocial personality disorder	33
2. Asthma mortality	28
3. Capitation fees	26
4. Chondrosarcoma of the skull	23
5. Densitometry and osteoporosis	37
6. Group psychotherapy and the aged	20
7. Neurologic manifestations of diabetes mellitus	19
8. Pars planitis	19
9. Radionuclide phlebography	10
10. Urinary catheterization and self-care	26

If you would like a copy of these searches or a search run on any biomedical topic, call or write the library.

SUSAN E. HARMAN
Reference and Circulation Librarian

Adele Wilzack, R.N., M.S.
Secretary of Health and Mental Hygiene
Eric M. Fine, M.D., M.P.H.
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MARCH 1986

1985 SEXUALLY-TRANSMITTED DISEASES (STD) TREATMENT GUIDELINES

Early Syphilis

Recommended Regimen

Early syphilis (primary, secondary, or latent syphilis of less than 1 year's duration) should be treated with:

Benzathine penicillin G 2.4 million units total IM at a single session

Penicillin-Allergic Patients

Patients who are allergic to penicillin should be treated with:

Tetracycline HCL 500 mg by mouth 4 times daily for 15 days

Tetracycline appears to be effective, but has been evaluated less extensively than penicillin. Patient compliance with this regimen may be difficult, so special care should be taken to encourage optimal compliance.

Penicillin-allergic patients who cannot tolerate tetracycline should have their allergy confirmed. For these patients there are two options:

1. If compliance and serologic follow-up can be assured, administer **erythromycin** 500 mg by mouth 4 times a day for 15 days.
2. If compliance and serologic follow-up cannot be assured, the patient should be managed in consultation with an expert.

Syphilis of More Than 1 Year's Duration

Recommended Regimen

Syphilis of more than 1 year's duration, except neurosyphilis, (latent syphilis of indeterminate or more than 1 year's duration, cardiovascular, or late benign syphilis), should be treated with:

Benzathine penicillin G 2.4 million units IM once a week for 3 successive weeks (7.2 million units total)

The optimal treatment schedules for syphilis of greater than 1 year's duration have been less well established than schedules for early syphilis. In general, syphilis of longer duration requires more prolonged therapy.

Therapy is recommended for established cardiovascular syphilis although antibiotics may not reverse the pathology associated with this disease.

Penicillin-Allergic Patients

There are no published clinical data which adequately document the efficacy of drugs other than penicillin for syphilis of more than 1 year's duration. Cerebrospinal fluid (CSF) examinations should be performed before therapy with these regimens.

Patients who are allergic to pencillin should be treated with: **Tetracycline HCL** 500 mg by mouth 4 times daily for 30 days. Patient compliance with this regimen may be difficult, so care should be taken to encourage optimal compliance.

Penicillin-allergic patients who cannot tolerate tetracycline should have their allergy confirmed. For these patients there are two options.

1. If compliance and serologic follow-up can be assured, administer **erythromycin** 500 mg by mouth 4 times daily for 30 days.
2. If compliance and serologic follow-up cannot be assured, the patient should be hospitalized and managed in consultation with an expert.

Cerebrospinal Fluid Examination

CSF examination should be performed in patients with clinical symptoms or signs consistent with neurosyphilis. This examination is also desirable for patients with syphilis of greater than 1 year's duration to exclude asymptomatic neurosyphilis.

Neurosyphilis

Published studies show that a total dose of 6-9 million units of penicillin G over a 3-to-4-week period results in a satisfactory clinical response in approximately 90% of patients with neurosyphilis. Regimens employing benzathine penicillin in standard doses or procaine penicillin in doses under 2.4 million units daily do not consistently provide treponemicidal levels of penicillin CSF, and several case reports document the failure of such regimens to cure neurosyphilis.

Drug Regimens

Potentially effective regimens, none of which has been adequately studied, include:

Aqueous crystalline penicillin G 12-24 million units IV/day (2-4 million units every 4 hours) for 10 days, followed by **benzathine penicillin G** 2.4 million units IM weekly for 3 doses

OR

Aqueous procaine penicillin G 2.4 million units IM daily **plus probenecid** 500 mg by mouth 4 times daily, both for 10 days followed by **benzathine penicillin G** 2.4 million units IM weekly for 3 doses

OR

Benzathine penicllin G 2.4 million units IM weekly for 3 doses.

Penicillin-Allergic Patients

Patients with histories of allergy to penicillin should have their allergy confirmed and should be managed in consultation with an expert.

Syphilis in Pregnancy

Evaluation of Pregnant Women

All pregnant women should have a nontreponemal serologic test for syphilis, such as the VDRL or rapid plasma reagin (RPR) test,

at the time of the first prenatal visit. If a woman is suspected of being at high risk for syphilis, a second nontreponemal test should be performed during the third trimester. Cord blood should be tested for syphilis antibody, and the results used as a baseline for follow-up.

Seroreactive patients should be evaluated promptly. This evaluation should include a history and physical examination, as well as a quantitative nontreponemal test and a confirmatory treponemal test.

If the treponemal test is nonreactive and there is no clinical or epidemiologic evidence of syphilis, treatment is unnecessary. Both the quantitative nontreponemal test and the confirmatory test should be repeated within 4 weeks. If there is clinical or serologic evidence of syphilis or if the diagnosis of syphilis cannot be excluded with reasonable certainty, the patient should be treated as outlined below.

Patients for whom adequate treatment for syphilis in the past is documented need not be re-treated unless there is clinical, serologic, or epidemiologic evidence of reinfection, such as darkfield-positive lesions, a fourfold titer rise of a quantitative nontreponemal test, or history of recent sexual exposure to a person with syphilis.

Recommended Regimens

For patients at all stages of pregnancy who are not allergic to penicillin, penicillin should be used in dosage schedules appropriate for the stage of syphilis as recommended for the treatment of nonpregnant patients.

Penicillin-Allergic Patients

For patients at all stages of pregnancy who have documented allergy to penicillin:

1. If compliance and serologic follow-up can be assured administer erythromycin in dosage schedules appropriate for the stage of syphilis as recommended for the treatment of nonpregnant patients. Infants born to mothers treated during pregnancy with erythromycin for early syphilis should be treated with penicillin.
2. If compliance and serologic follow-up cannot be assured, the patient should be hospitalized and managed in consultation with an expert.

Tetracyclince is not recommended in pregnant women because of potential adverse effects on the fetus.

Follow-Up

Pregnant women who have been treated for early syphilis should have monthly quantitative nontreponemal serologic tests for the remainder of the current pregnancy. Women who show a fourfold rise in titer should be re-treated. Treated women who do not show a fourfold decrease in titer in a 3-month period should be re-treated. After delivery, follow-up is as outlined for non-pregnant patients.

Congenital Syphilis

Congenital syphilis may occur if the mother has syphilis during pregnancy. If the mother has received adequate penicillin treatment during pregnancy, the risk to the infant is small. However, all infants should be examined carefully at birth, at 1

month, and every 3 months for the first 15 months, and then every 6 months until nontreponemal serologic tests are negative or stable at low titer. If a serologic test is positive at 3 months, the infant should be treated for congenital syphilis.

Infected infants are frequently asymptomatic at birth and may be seronegative if the maternal infection occurred late in gestation. Infants should be treated at birth if maternal treatment was inadequate or unknown or did not include penicillin, or if adequate follow-up of the infant cannot be ensured.

Infants with congenital syphilis should have a CSF examination before treatment to provide a baseline for follow-up. Regardless of CSF results, children should be treated with a regimen effective for neurosyphilis.

Recommended Regimens for Symptomatic or Asymptomatic Infants

Aqueous crystalline penicillin G 50,000 units/kg IM or IV daily in two divided doses for a minimum of 10 days.

OR

Aqueous procaine penicillin G 50,000 units/kg IM daily for a minimum of 10 days.

In asymptomatic infants whose mothers were treated adquately with a penicillin regimen during pregnancy, treatment is not necessary if follow-up can be ensured. In asymptomatic infants whose follow-up cannot be ensured, many consultants choose to treat the infant with benzathine penicillin 50,000 units/kg IM in a single dose. It is recognized that data on the efficacy of this regimen in congenital neurosyphilis are lacking; therefore, if neurosyphilis cannot be excluded, the aqueous crystalline penicillin or procaine penicillin regimens are recommended. Only penicillin regimens are recommended for neonatal congenital syphilis.

After the neontal period, penicillin therapy for congenital syphilis should be with the same dosages used for neonatal congenital syphilis. For larger children, the total dose of penicillin need not exceed the dosage used in adult syphilis of more than 1 year's duration. After the neonatal period, the dosage of tetracycline for congenital syphilis in patients who are allergic to penicillin should be individualized but need not exceed dosages used in adult syphilis of more than 1 year's duration. Tetracycline should not be given to children less than 8 years of age.

Management of Sex Partners

Patients who have been exposed to infectious syphilis within the preceding 3 months and other patients who, on epidemiologic grounds, are at high risk for early syphilis should be treated as for early syphilis. Every effort should be made to etablish a diagnosis in these cases.

Guidelines will continue in the April Newsletter.

Adapted from the Centers for Disease Control (CDC), Morbidity and Mortality Weekly Report (MMWR) Supplement, October 18, 1985/Vol. 34/No. 4S.

Maryland Oncology Newsletter

Soft Tissue Sarcomas: Etiology and Diagnosis

This complex and diverse group of tumors is rare, constituting only 0.7 percent of all cancers. Less than 5,000 cases are diagnosed annually in the U.S. These originate mainly from the mesoderm; some are endothelial.

The *etiology* is mostly unknown. Although trauma with scar formation has been blamed as a possible factor, there is no evidence for such claims. Chemical carcinogens such as vinyl chloride, phenoxy acids, and chlorophenols also have been implicated. Other etiological factors include prior irradiation, genetic (neurofibrosarcoma and Gardner's Syndrome), viruses such as acquired immune deficiency syndrome (that may relate to Kaposi's Sarcoma), and other undetermined factors. Two characteristics of soft tissue sarcomas are that they have no sex or race selection and that they affect all ages. Some cell types affect children, mainly in the head or neck regions, while other cell types have preselection for adults. Kaposi's Sarcoma has a high incidence in homosexual men.

The *clinical presentation* is usually in the form of a mass in the skin, subcutaneous tissue, or muscle. Occasionally it may present in the retroperitoneal space or viscerae. The primary sites are mainly in the extremities in the adult population, and in the head and neck area in children:

	Percent
Lower extremities	42
Trunk	30
Upper extremities	16
Head and neck	12 (mainly children)

According to the World Health Organization (WHO) these tumors are *classified* according to the cell type or the tissue of origin as follows:

Fibrous tissue	Fibrosarcoma, dermatofibrosarcoma, desmoid
Adipose tissue	Liposarcoma
Striated muscle	Rhabdomyosarcoma
Smooth muscle	Leiomyosarcoma
Vascular tissue	Angiosarcoma, Kaposi's Sarcoma, lymphangiosarcoma, malignant hemangiopericytoma
Synovia	Synovial sarcoma
Mesothelium	Malignant mesothelioma
Neurogenic	Malignant schwannoma, neurogenic sarcoma
Histiocytic	Malignant fibrous histiocytoma, giant cell tumor of soft tissue
Cartilage	Chondrosarcoma

and others of debatable origin such as: alveolar sarcoma, clear cell sarcoma, and extraossous Ewing and osteogenic sarcomas. While most of these sarcomas have the potential to metastasize systemically via the blood, synovial sarcoma and malignant fibrous histiocytoma have the highest tendency for lymph node metastasis.

The *diagnosis* is usually established by biopsy of the lesion. However, needle biopsy should not be attempted as it is usually unsuccessful. Small lesions can be excised. Large lesions should have incisional biopsy. The biopsy site should be (a) small, (b) directly over the lesion, (c) a vertical approach, not open tissue planes, and (d) should fall within the center of the definitive resection. CT scan is the test of choice to determine size and relation to bone or other vital structures. Angiography is helpful in determining the blood supply to the tumor or involvement of main vessels.

Tumor Conferences are held weekly on Fridays between 8–9 a.m. in Room N13E28 at the University of Maryland Hospital. This is an open meeting; physicians are welcome to attend and to present cases, but please call 528-5224 before Friday to obtain scheduled time for your case(s) and bring the pathological slides with you.

E. GEORGE ELIAS **MD**
University of Maryland, Surgical Oncology Program

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

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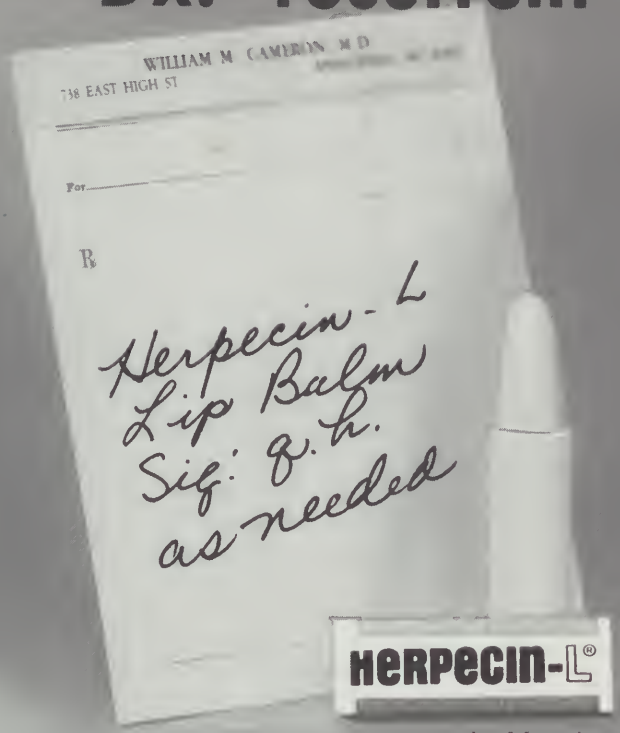
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References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

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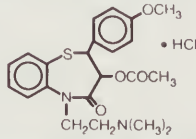
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In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral/LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

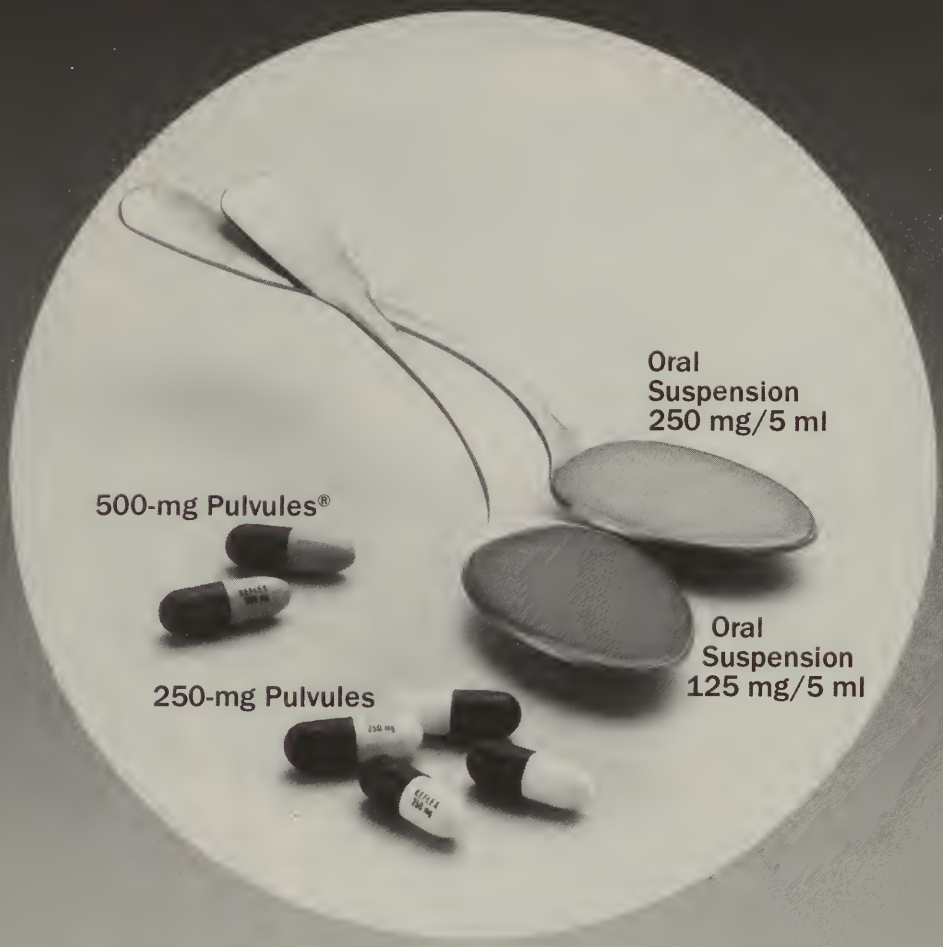
Cardizem 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

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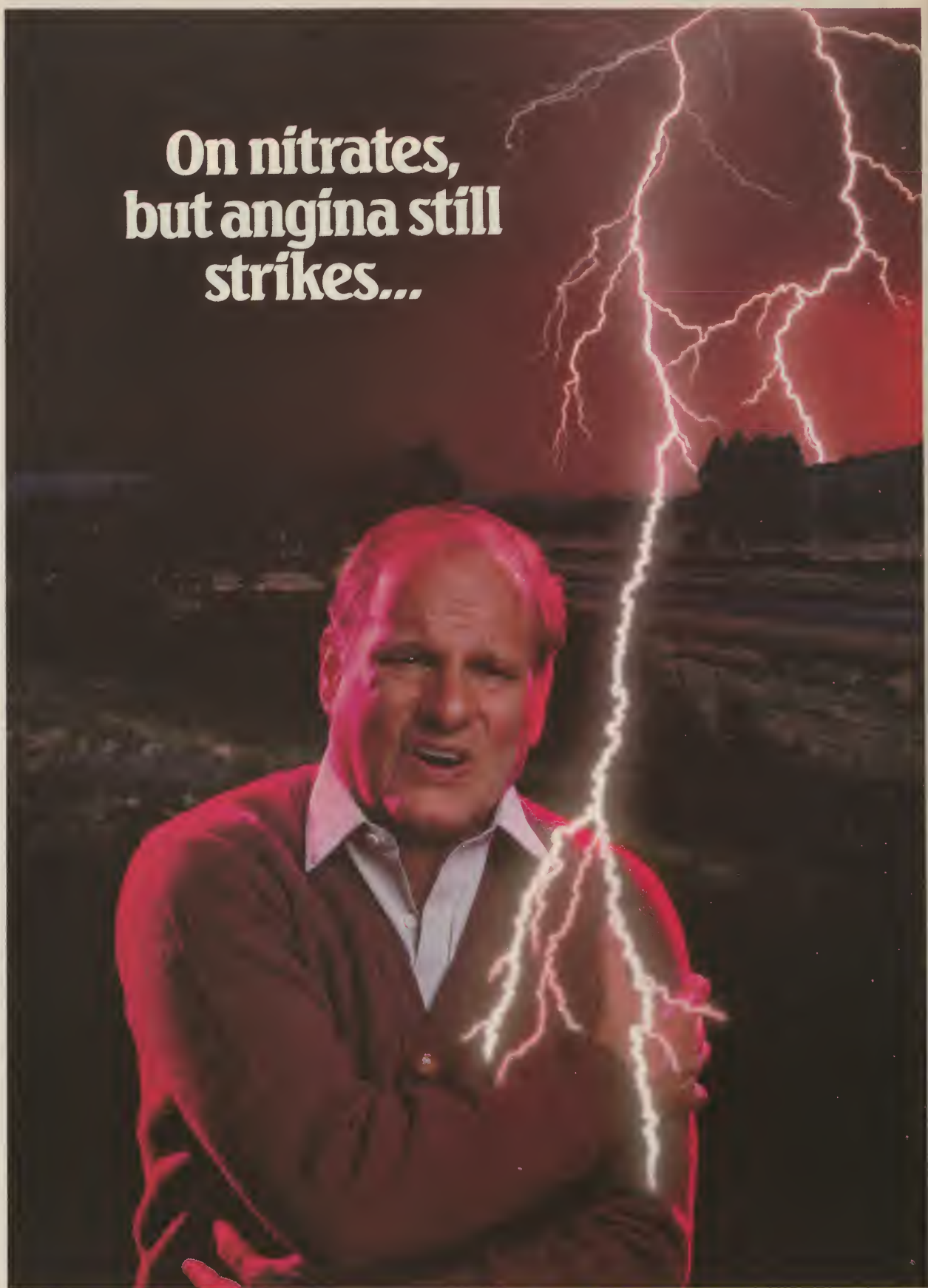
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Cardiovascular contraindications to the use of Isoptin are similar to those of beta blockers: severe left ventricular dysfunction, hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no artificial pacemaker is present) and second- or third-degree AV block.

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Contraindications: Severe left ventricular dysfunction (see *Warnings),* hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.)* Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

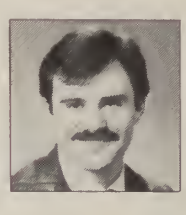
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J-6138 January 1986

Physician Income and Its Sources: Maryland

JOY BASU PhD

Although the study of physician income is a very important part of health expenditures analysis, the availability of suitable statewide data is a major bottleneck in this venture. Thus, in several instances, national percentages had to be used to fill gaps in state data. The following analysis is the closest approximation of physician income and sources that can be made within the existing constraints.

Completed in February 1983, the original version of this study is available from the Maryland Health Resources Planning Commission. The author is with the Department of Health and Mental Hygiene, 201 West Preston Street, Baltimore, MD 21201.

A funds-flow study in health care presents expenditures by different categories of health services and by different sources of payment. A flow-of-funds statement analyzes the origin and direction of health-care funds to prevent misallocation and to increase the distributional efficiency of scarce health-care dollars.

Expenditures for physician services have been growing at a rapid pace. In 1965, these amounted to $8.5 billion or $43 per person in the U.S. By 1979, expenditures had risen to $180 per person.[1] Inflation was a significant contributor to the growth of expenditures for physician services. The increasing number of physicians and their increasing specialization also has contributed to the expenditure trend.[2]

Because of the dominant role of physicians in the health-care market, a study of physician income and its sources helps indicate the distribution of funds within this sector. While national health expenditure studies[3] provide detailed data on this distribution pattern for the physician community as a whole, there are few state-specific studies. Pioneering work in the field of health expenditure studies (for Rhode Island) is found in the SEARCH Reports.[3] Several organizations have subsequently carried out such studies at state, county, and city levels.*

In this study, physician income and composition is analyzed with a special emphasis on nonfederal office-based practitioners on the ground that physician income (or expenditure) earned in hospitals usually is treated as a part of expenditures on hospital services.

Unlike usual funds-flow studies, this study is not merely a presentation of sources-and-uses statements. Implications of these statements are fully explored and a complete analysis of physician income by source is attempted. The chief purpose of the study is to determine and analyze physician income in Maryland across specialties and by source of payments.

Physician Income and Composition

Physician expenditures usually include funds spent for health care services rendered by nonfederal licensed, self-employed (office-based) medical doctors (MDs) and doctors of osteopathy (DOs). The National Health Accounts defines physician expenditures as equivalent to gross business receipts of such physicians. Physician services delivered in nursing homes, neighborhood health centers, and public clinics, as well as physician income derived from administrative, teaching, and research positions, are excluded from the purview of this analysis.

To analyze physician income and its composition in Maryland, the first major task was to estimate this income trend for the years 1975 to 1980. There are two generally accepted procedures to compute gross business receipts of physicians: (1) multiply the number of physicians by their average gross business receipts; (2) multiply the number of visits of each type (initial as well as follow-up) by fees for each type. The second procedure is more complicated than the first as far as availability of data is concerned. As a result, the first approach is recommended in the Arthur Young[4] reports and has been used by SEARCH.[3] This study, too, uses the first procedure to compute gross business receipts of office-based physicians:

- The total number of physicians is estimated by specialty.
- The average gross business receipts of such physicians is computed in the corresponding amounts of detail.
- The number of physicians is multiplied by their average gross business receipts to arrive at total gross business receipts of physicians in each specialty.

The primary data source used in this study is the American Medical Association (AMA). AMA data covers only MDs, not DOs. Therefore, estimates of physician income are made on the basis of available information on MDs alone.

Data on number of nonfederal office-based MDs by specialty and by state is available from the AMA's annual publication *Physician Distribution and Medical Licensure in the U.S.*, for each year 1975 to 1980. Data on average net income and average net office expenditure by specialties of physicians (MDs) is available from the AMA's annual publication *Profile of Medical Practice*. These two series are combined to generate the average gross income of physicians. However, AMA does not publish these figures by state; the best disaggregation is by census regions. Since Maryland belongs

* State studies such as in Illinois, Louisiana, Massachusetts, New York, and Washington should be mentioned in this context. There are more than ten regional, county, and city studies as well.

Table 1. Maryland Nonfederal MD Gross Income in Office-Based Practice, by Major Professional Areas

	1975	1976	1977	1978	1979	1980* (Estimated)	Average Annual % Change 1975 to 1980
Total* MDs	$423,608,894	$451,088,513	$546,858,000	$576,414,900	$733,441,500	$858,035,424	15.6
General Practice†	52,750,665	52,673,657	64,910,500	71,595,700	84,456,000	93,935,611	12.8
Internal Medicine	68,933,072	74,082,957	82,916,000	93,353,200	123,340,800	156,309,216	18.3
Pediatric	26,193,077	26,116,145	33,862,500	31,633,200	44,183,400	51,257,945	16.0
General Surgery	46,281,066	50,828,323	56,851,200	57,346,900	72,558,000	85,667,040	13.5
Obstetrics/Gynecology	51,584,589	58,452,855	72,323,100	64,520,700	80,376,400	89,089,452	12.4
Radiology	10,678,470	13,597,750	17,444,000	16,518,600	18,648,000	21,198,826	15.4
Psychiatry	27,664,760	28,673,557	28,633,200	36,844,800	35,234,200	39,867,720	8.3
Anesthesiology	13,536,546	14,263,858	21,240,000	18,581,400	29,198,400	35,093,168	23.9
Others	125,986,649	132,399,410	168,677,500	186,020,400	245,446,300	285,616,446	18.3

Source: American Medical Association

* 1980 figures are derived by multiplying the number of physicians in different specialties in 1980 by an *estimated* average gross income of physicians in those specialties

† Includes family practice

to the South Atlantic census region,† the average net income and average office expenditures of physicians practicing in that region can be used as proxies for the same statistical series for Maryland. This is a general procedure recommended in health expenditure study guidelines.[5] However, because many states in the South Atlantic region tend to have lower medical costs in general, the estimates may be subject to a downward bias.

AMA specialty codes cover about 34 medical specialties; however, its data on average net income and average net expenditure of physicians are published for only eight specialty categories: general practice, internal medicine, pediatrics, general surgery, obstetrics/gynecology, radiology, psychiatry, and anesthesiology. These eight categories constituted about 70 percent of total physician population in patient care in the year 1978 in Maryland.[6] The remaining specialties are treated in aggregate fashion only in this study.

Gross Income

Physicians' total gross income in Maryland, Table 1, is a product of a series of calculations for each year of physicians income. A two-way classification of physician income (over time and across specialties) allows analysis of both intergroup variation and variation over time.‡ The table shows that physician gross income in Maryland more than doubled from $423 million in 1975 to $863 million in 1980. However (not shown) gross income increased little in terms of constant dollars. In 1967 dollars, the increase was from 250 million in 1975 to 318 million in 1980 (about 28 percent). Intergroup variation in rates shows the highest average annual increase occurred in anesthesiology (23.9 percent) and the lowest increase occurred in psychiatry (8.3 percent).

Total gross income can be divided in two components, number of physicians and their average or per capita income. As a whole, the number of nonfederal physicians in Maryland in office-based practice increased from 4,462 in 1975 to 6,256 in 1980, or by about 40 percent. Average income (or business receipts per physician) also increased in that period, by about 44 percent in terms of current dollars. However, in constant dollars, average receipts fell slightly between 1975 and 1980.

Examination of each specialty shows that in all but three, per capita physician income has increased at a faster rate than has the number of physicians (Figure, next page). The three areas showing increase in physician supply are internal medicine, obstetrics/gynecology, and psychiatry. In all others, total gross income rose more as a result of growth of average income levels of physicians. In general practice, in particular, physician supply increased at a mere 1.48 percent annually, while the per capita income of general practitioners rose at the second highest rate (11.2 percent) in the sample group.

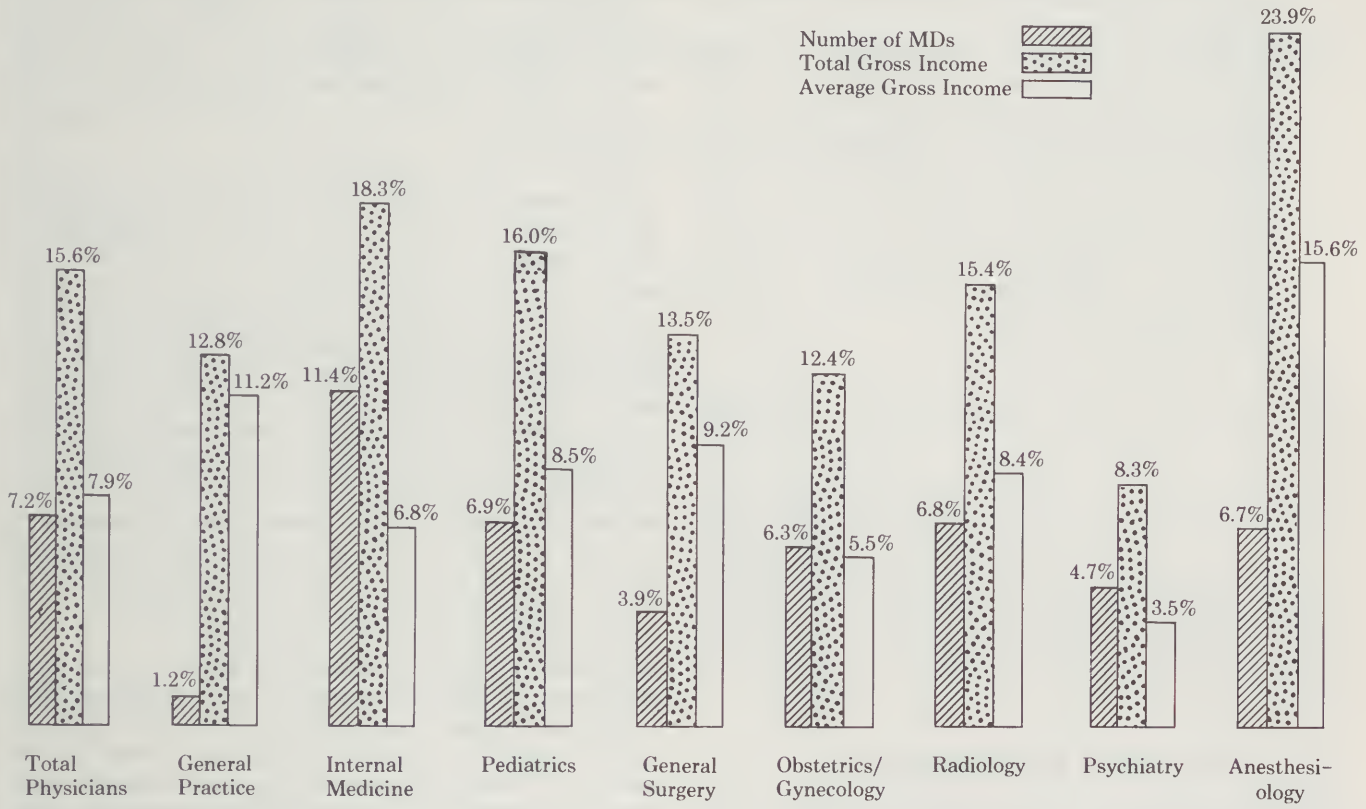
Composition

It thus can be inferred from the data that, in conformity with national trends, there has been only a small increase in the supply of general practitioners in Maryland in the period 1975 to 1980. However, the overall supply of primary care physicians as a proportion of total Maryland physicians in office practice has not declined much during the period. This happened mainly because the growth in supply of internists and pediatricians compensated for the sluggishness in GP supply growth. The proportion of primary care physicians to total physicians in office practice declined

† The South Atlantic census region includes Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, and the District of Columbia.

‡ Total gross income estimates in Table 1 can be compared with estimates from a study by HCFA[12] of personal health care expenditures. The study estimated personal health care expenditures for different health care services in each state (total as well as per capita), based on Internal Revenue Service 100 percent file of tax returns. It estimated expenditure for physician services in Maryland as $533.1 million in 1976, $591.0 million in 1977, and $677.4 million in 1978. These figures are slightly higher than those presented in Table 1 for those years. The reasons for difference might be (1) gross income calculations in the HCFA study are based on the Internal Revenue Service data file; (2) data for health service expenditures presented for each state were derived from national estimates; (3) AMA's average gross physician income data are based on census regions, and Maryland's medical costs are generally higher than those of some other states in the South Atlantic region, which gives a downward bias to income data for Maryland.

Figure. Average Annual Rates of Increase of Number of Office-Based MDs, Total Gross Income, and Average Gross Income by Specialty, Maryland 1975 to 1980



Source: Estimated from American Medical Association data

slightly from 38.2 percent in 1975 to 36.5 percent in 1979 and then rose again to 37.3 percent in 1980. This finding goes against a widespread perception that physicians have shifted increasingly from primary care to specialty areas. In fact, in Maryland, internal medicine and pediatrics are two categories in which physician supply increased most rapidly during the study period. The relative proportion of general practitioners, however, fell from 15 percent in 1975 to 11 percent in 1980. The proportion of internists increased from 15 percent in 1975 to 18 percent in 1980, while that for pediatricians stayed at a constant 8 percent.

It is worth mentioning that internal medicine and general practice are the two specialties that compose the largest shares of the income pie. These two specialties took in 28 percent of total physician gross income, over a quarter of the income pie in 1979.

Physician Income and Sources

This part of the study attempted to relate physician income to sources of payment. Physician reimbursement patterns, to a large extent, determine physician income. Broadly, there are two payment sources: direct payment by consumers and third-party payments. Third-party payors are primarily divided between private health insurors and government (Medicare and Medicaid).

Nationally, physician reimbursement patterns have changed dramatically in the last two decades; third-party payments were only 38.7 percent of total physician reimbursement in 1965, rose to 65.2 percent in 1975, and fell slightly in 63.5 percent in 1979. Direct payments by consumers as a proportion of the total consequently declined from 62.3 percent in 1965 to 36.5 percent in 1979. A large part of the increase in third-party reimbursement was due to the advent of Medicare and Medicaid in the mid-1960s.

The complexity of preparing a source profile for physician income in Maryland cannot be exaggerated. The hardest problem has been the lack of reliable and comparable statewide data from different third-party payor groups. Data have been collected on major payors: Medicare, Medicaid, and private health insurors.

In addition to the specific gaps and constraints in data bases to be discussed later, two general problems that affect data comparability need to be mentioned here:

1. Medicare payment data provided by HCFA and Blue Shield payment data provided by Maryland Blue Shield and MSDC (Medical Services in the District of Columbia) include, in addition to physician payments, those made to related health professionals (such as podiatrists, chiropractors, and optometrists) in a single group. However, these professionals are generally separately categorized in national health expenditure models[7] and, therefore, income earned by these professionals was excluded from the computation of physician total gross income in the first part of this study.

The problem is partially solved by adjusting the data through using percentages that these professionals' income represent in national health expenditure estimates.

2. The distinction between hospital-based and office-based physicians cannot be made in all cases. Most important, Medicare data include payment for those physicians whose bills are submitted by hospitals on HCFA-1554 (formerly SSA-1554). These payments could not be separated from those made to office-based physicians alone. However, the percentage of reimbursement through HCFA-1554 is very small in relation to total Medicare physician reimbursement (nationally, it is only 3 percent),[13] so no adjustment was made.

Preparation of a complete source profile is restricted to the year 1979. The lack of MSDC data for years prior to 1979 was the major constraint. The lack of supporting data in computing health insurance reimbursement for the year 1980 was another reason for choosing the year 1979. However, since Medicaid and Medicare payment data are available for years other than 1979, and also by physician specialty, these payor sources are analyzed for the period 1975 to 1980. In accordance with conventional procedure, direct or out-of-pocket expenditure is treated as a residue in the analysis.

Medicaid Reimbursement

Medicaid provides total coverage of physician services for eligible low-income persons. Basically, those eligible include all persons in families with dependent children, the blind, the disabled, and the aged, who have incomes below a state-mandated level, as well as some individuals in these groups with higher incomes but extraordinarily high medical expenses. Maryland's Medical Assistance Program has, in addition, "state only" eligibility categories that include persons who are not aged, blind, disabled, or in families with dependent children.

Table 2 indicates that for 1975 to 1977 relatively higher amounts of payments were made by Medicaid for physician office services. However, since 1978, a slightly higher proportion of Medicaid physician payments have been directed toward physicians for their hospital practices. The overall trend has been a decrease in the proportion of payments made for office visits in comparison to hospital visits. A possible partial explanation for this can be found in the fact that Medicaid office-visit fee ceilings are frequently lower than fees charged to private-pay patients. This disparity discourages office-based private practice physicians from accepting Medicaid patients, thereby forcing patients to seek care in higher cost hospital outpatient department and emergency rooms, or in "Medicaid mills."[8] The extent of this substitution apparent in Maryland data has important public policy implications.

Table 3 shows the percentage of Medicaid payments to different specialties in calendar years 1979 and 1980. The three primary care specialties (general practice, internal medicine, and pediatrics) accounted for 67 percent of Medicaid payments in the year 1980. This can be explained by the fact that, in general, primary care practitioners are more likely to have large Medicaid practices than are specialists.[9] As expected, the highest

Table 2. Medicaid Payments to Office-Based Physicians, Maryland 1975 to 1980

	1975		1976		1977		1978		1979		1980	
	$	%	$	%	$	%	$	%	$	%	$	%
Office*	11,143,234	56.3	11,290,134	53.4	10,763,578	52.1	9,909,844	48.6	10,146,685	45.9	13,109,322	46.8
Other†	8,643,017	43.7	9,830,058	46.6	9,883,189	47.9	10,462,101	51.4	11,941,810	54.1	14,870,881	53.2
Total payments	19,786,251	100.0	21,120,192	100.0	20,646,767	100.0	20,371,945	100.0	22,088,495	100.0	27,980,203	100.0

Source: Maryland Medical Assistance Program
* Including free-standing clinic payments
† Payments made to physicians for seeing an inpatient or an outpatient in a hospital

Table 3. Medicaid Payments to Physicians in Maryland, 1979 and 1980

	1979		1980		Percent Change in Medicaid Payments from 1979 to 1980
	$	%	$	%	
All Physicians	22,088,495	100.0	27,980,203	100.0	26.7
General Practice	7,875,578*	35.6	13,055,721*	46.6	65.8
Internal Medicine	2,446,570	11.1	2,695,760	9.6	10.2
Pediatrics	2,505,751	11.3	3,013,476	10.8	20.3
General Surgery	1,887,317	8.5	1,719,329	6.1	(8.9)
Obstetrics/Gynecology	2,311,760	10.4	2,486,005	8.8	7.5
Radiology	1,226,178	5.6	670,182	2.4	(45.3)
Psychiatry/Neurology	434,523	2.0	445,034	1.6	2.4
Anesthesiology	606,802	2.8	580,310	2.1	(4.4)
Other	2,794,016	12.5	3,314,386	11.9	18.6

Source: Maryland Medical Assistance Program
* Excludes family practice. If family practice physicians are included in the GP category, the total goes up to $8,197,751 and $13,833,682 in 1979 and 1980 respectively

Table 4. Payments to Maryland Office-Based Physicians, Medicaid and Medicare

	1975	1976	1977	1978	1979	1980
Medicaid*						
$	19,786,251	21,120,192	20,646,767	20,371,945	22,088,495	27,980,203
%	4.67	4.68	3.78	3.53	3.01	3.97
Medicare†						
$	45,067,000	54,950,000	72,939,000	85,227,000	104,776,000	116,739,000
%	10.6	12.2	13.3	14.8	14.3	13.5
Gross income of physicians‡						
$	423,608,894	451,088,513	546,858,000	576,414,900	733,441,500	858,035,424
%	100.0	100.0	100.0	100.0	100.0	100.0

Source: Maryland Medical Assistance Program
Medical Insurance Table, Health Care Financing Administration
* Includes payments made for physicians' office services and for seeing an outpatient or inpatient at a hospital; excludes payments made to other health professionals such as optometrists, podiatrists, physical therapists
† Includes payments made to all health professionals' services
‡ Represents total gross income of physicians as presented in Table 1

proportion of Medicaid money in Maryland is spent for reimbursement to general practitioners.

Medicare Reimbursement

Medicare, under Part B, provides insurance coverage of physician services for all persons age 65 and older, disabled persons entitled to social security cash benefits for 24 consecutive months, and persons with end-stage renal disease. Coverage must be purchased by the individual through the payment of a monthly premium; it is not mandatory.

Physicians have two options for obtaining reimbursement for their services under Medicare Part B. They may accept assignment of the claim for their services, which involves submitting a bill directly to the Medicare carrier for their area. The second option is to bill on a nonassigned basis. In this case, the physician bills the patient directly and expects payment of the full amount of the bill in settlement.

Data used for examining Medicare reimbursement in Maryland are obtained from two sources:

- The Medical Insurance Table, containing information based on bills approved by fiscal intermediaries. Data cover all resident beneficiaries of Maryland and include physicians who bill on any one of Forms HCFA-1490, HCFA-1556, or HCFA-1554.
- The Medicare Physicians Payment Project, providing detailed state data on amounts reimbursed for physician services by Medicare from the year 1975 through 1978, by each specialty code and each type of service. Unfortunately, the Maryland data failed to report two counties, Prince George's and Montgomery, and Group Hospitalization, Inc. was unable to supply the missing data.

A caution with respect to the data is that both the Medical Insurance Table and the Physicians Payment Project data include health professionals other than physicians (such as podiatrists, chiropractors, and psychologists). These health professionals were excluded from the computation of physician gross income values in Table 1. However, nationally, Medicare payments to these health professionals accounted for 8 percent of total Medicare Part B payments in 1979.

Table 4 shows that Medicare's share of physician payments has been increasing through 1978, but dropped in 1979 and again in 1980. This can be compared with Medicaid's declining percentages shown in the same table.

It is evident from Table 5 that U.S. and Maryland have the same patterns of distribution, except in the area of general practice. In Maryland, general practitioners' share of Medicare payments is almost half the U.S. average. This table also shows that almost half of Medicare money (for physicians) reimburses physicians in the eight major specialties. In contrast, Medicaid pays 88 percent for physicians in these eight categories.

For the three primary care specialties (general practice, internal medicine, and pediatrics) Medicaid payments are almost double their Medicare payments. The highest proportion (23.5 percent) of Medicare money is paid to internists and the lowest (0.1 percent) to pediatricians.

Table 5. Percent Medicare Payments to Physicians by Specialty, U.S. and Maryland*, 1976 and 1978

	1976		1978	
	US	MD	US	MD
Physicians				
General Practice†	12.1	5.0	9.1	3.8
Internal Medicine	19.0	19.8	19.0	22.4
Pediatrics	0.1	0.1	0.1	0.1
General Surgery	11.1	13.1	10.0	12.4
Obstetrics/Gynecology	0.8	1.4	0.7	1.3
Radiology	5.6	2.2	6.0	1.4
Psychiatry	1.0	0.5	1.1	0.5
Anesthesiology	4.1	4.3	4.3	4.9
Other physicians and health professionals	46.2	53.6	49.7	53.2
Total	100.0	100.0	100.0	100.0

Source: Medicare Physicians Payment Project, Health Care Financing Administration
* Represents area served by Blue Shield of Maryland; excludes data for Prince George's and Montgomery counties; also excludes reimbursements for railroad beneficiaries residing in Maryland
† Excludes family practice

One point worth making is that, in Maryland, Medicare reimbursement for primary care physicians increased at a higher rate than did Medicare payments to all physicians. However, for the nation as a whole, the opposite has been true. While payments for GPs and internists increased by 32 percent nationally, those for all physicians increased by 44 percent between 1976 and 1978. In Maryland these rates were 88 percent and 77 percent respectively. (The same pattern was found to be true for Medicaid.)

Private Health Insurance Reimbursement

There are three main groups offering private health insurance: Blue Cross/Blue Shield plans, commercial insurance companies, and independent prepaid and self-insured plans. Coverage for physician services is provided by insurance plans in four broad areas: surgical services, in-hospital visits, x-ray and laboratory examinations, and office and home visits.

Nationally, Blue Cross/Blue Shield and commercial insurance companies make almost equal amounts of benefit payments for physician services. In 1979, Blue Cross/Blue Shield plans represented 40.1 percent of the industry total of $14.7 billion, commercial insurance companies represented 40.2 percent, and nonprofit independent plans accounted for the remaining 19.8 percent.[10]

A major portion (87 percent in 1979) of Blue Shield's total payments represents payments for physician services. Excepting Blue Shield, all other insurors spend major portions of their benefit expenditures for hospital coverage. In general, 60 percent of private health insurance expenditures consist of hospital care, 29 percent of physician services, and 11 percent of other services such as dental care, prescribed drugs, nursing home care, and vision care.[10]

The basic problem in estimating private insurance expenditures for physician services in Maryland is the gaps in existing data. Excepting limited aggregate statewide data provided by the Health Insurance Association of America (HIAA), no state-specific data or study exists in this area. The following estimates of private insurance payments for Maryland physicians are, therefore, based on the assumption that Maryland follows the national pattern, except when it can be demonstrated that this assumption is untenable.

Maryland is divided in two parts as far as Blue Shield's coverage is concerned. Maryland Blue Shield serves all subscribers in Maryland except those in Prince George's and Montgomery counties. The population in those two counties enroll under D.C. Blue Shield (Group Hospitalization, Inc.) plans. Thus, total Blue Shield payments in Maryland are obtained by adding the payments made by these two organizations. This total, however, includes payments to related health professionals, since these cannot be separated even in the national data.

In estimating total private health insurance reimbursement for physician services, the largest unknown variable is payment by commercial insurors. Thus, several assumptions have been made in order to approximate total insurance reimbursement in Maryland. Applying national percentage of Blue Shield's payment to total private insurance payment to Blue Shield data for Maryland permits a rough guess of total private insurance payments in Maryland. However, this estimating method generates a very high percentage for insurance reimbursement in Maryland (77 percent), which is well above the national rate (37.3 percent).

There is reason *not* to assume that national percentages should be applicable to Maryland, because there are large interstate variations in Blue Shield's relative coverage and average benefit payments per enrollee. Maryland's Blue Cross/Blue Shield coverage is above the U.S. average; in 1979, it was 43 percent, while the corresponding national average was 36 percent.[11] Average benefit payments per enrollee might also vary from state to state, causing large interstate variations in benefit payments made by Blue Cross/Blue Shield and other insurance plans. Table 6 shows estimates of Blue Cross/Blue Shield average benefit payments and also benefit payments made by other commercial insu-

Table 6. Number of Enrollees (under 65), Benefit Payments to Health Care Professionals, and Average Benefit Expenditures, U.S. and Maryland, 1979

	Number of Enrollees (under 65) (000)		Benefit Payment to Health Care Professionals (000,000)		Benefit Expenditure per Enrollee	
	US	MD	US	MD	US	MD
Blue Cross/Blue Shield	68,222*	1,335	$ 5,879.8	$227.436	$ 86.19	$170.36
Other insurors	110,914	1,658	8,797.1	257.430	79.31	155.27
Commercial insurance companies	90,409	N/A	5,895.6	N/A	65.20	N/A
Nonprofit independent plans	20,505	N/A	2,901.5	N/A	141.50	N/A
Total private insurors	179,136†	2,993†	14,676.9	484.387	81.93	161.84

Source: Health Insurance Association of America
Health Care Financing Review, September 1981, p. 79

* Includes 5,538 thousand enrolled under individual insurance, and 62,684 thousand enrolled under group insurance plans

† Represents gross enrollment under insurance plans, involving duplication among persons protected by more than one kind of insuring organization or more than one insurance company providing the same type of coverage

rors in Maryland§ based on the assumptions that (1) per-enrollee benefit payments by different insurance plans bear approximately the same relation to each other in various states, and (2) the U.S. average closely represents this relation. These are restrictive assumptions but are currently the only feasible way to get a reasonable estimate. The estimates show that private insurance paid for 66 percent of total expenditures for physician services in Maryland in 1979, 47 percent of which was contributed by Blue Cross/Blue Shield. Nationally, private insurance paid for 37.3 percent of physician payments, 40 percent of which was attributable to Blue Cross/Blue Shield.

The Source Profile

Table 7 shows that Medicare, Medicaid, and private health insurance expenditures on physician services approximately total third-party payments made to physicians. It should be noted that Medicare and private health insurance figures are slightly less than those presented in Tables 4 and 6; adjustments have been made to those values by subtracting from total physician expenditures those portions accounted for by related health professionals. Adjustments also have been made to gross income estimates by adding an estimated amount of osteopath income to it.

Table 7 shows that Medicaid, Medicare, and private health insurance respectively accounted for 3.0 percent, 13.1 percent, and 63.4 percent of physician gross income in Maryland in 1979. These three together were, therefore, responsible for 79.5 percent of expenditures for physician services. The residual (representing out-of-pocket, philanthropic, and other federal/state expenditures) was obtained by subtracting third-party payments from total gross income and accounted for 20.5 percent of physician expenditures in 1979. The corresponding figure for the U.S. was 41.4 percent in the same year.‖

Table 7. Estimate of Maryland Physicians Income by Source, 1979

	$	%
Total Gross Income	734,397,000	100.0
Medicaid	22,088,000	3.0
Medicare	96,393,920	13.1
Private health insuror	465,471,360	63.4
Direct and other* expenditure	150,443,720	20.5

Source: Tables 1, 4, and 6

* Includes workers' compensation, veterans' medical care, Department of Defense medical care, and other government programs

Acknowledgments

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References

1. *Health Care Financ Rev* Summer 1980, pp. 3–4.
2. Worthington, N. "Expenditures for Hospital Care and Physician Services: Factors Affecting Annual Changes." *Soc Sec Bull* November 1975.
3. Zimmerman, H. and Buechner, J. "Health Expenditures in Rhode Island: 1974." *SEARCH Reports* 19, January 1977.
4. Arthur Young and Company. *The CFF Data System: Final Report on the Development of the Community Funds Flow Data System*, 1975.
5. Health Planning Information Series. *Guide to the Collection and Use of Health Expenditures and Utilization Data for Health Planning Agencies*. U.S. Department of Health Education and Welfare Publication No. (HRA) 78-14008, January 1978, pp. 72–73.
6. American Medical Association, *Physician Distribution and Medical Licensure in the U.S.*
7. Gibson, R.M. and Waldo, D.R. "National Health Expenditures, 1980." *Health Care Financ Rev* September 1981, p. 9.
8. Burney, I.L.; Schieber, G.J.; Blaxall, M.O.; and Gabel, J.R. "Medicare and Medicaid Physician Payment Incentives." *Health Care Financ Rev* Summer 1979, p. 66.
9. National Estimates of Average Medicaid Participation Rates Across Specialties of Physicians Confirm this Hypotheses. See Mitchell, J.B. and Cromwell, J. "Medicaid Mills: Fact or Fiction." *Health Care Financ Rev* Summer 1980; also, Sloam, F.A.; Cromwell, J.; and Mitchell, J.B. *Private Physicians and Public Programs.* Lexington, MA: D.C. Heath, 1978.
10. Carroll, M.S. and Arnett, R.H. III, "Private Health Insurance Plans in 1978 and 1979: A Review of Coverage, Enrollment and Financial Experience." *Health Care Financ Rev* September 1981, p. 79.
11. Health Insurance Institute. *Source Book of Health Insurance Data, 1980–81.* Washington, DC: Health Insurance Institute, p. 19.
12. Levit, K.R. "Personal Health Care Expenditures by State, Selected Years 1966–1978." *Health Care Financ Rev* December 1982, pp. 1–45.
13. Pine, P.L.; Gornick, M.; Lubitz, J.; and Newton, M. "Analysis of Services Received Under Medicare by Specialty of Physicians." *Health Care Financ Rev* September 1981, pp. 90–91. For a detailed discussion of hospital-based physicians see Steinwald, B. "Hospital-Based Physicians: Current Issues and Descriptive Evidence." *Health Care Financ Rev* Summer 1980, pp. 63–75.

§ Assuming that Blue Cross pays 8 percent (the national percentage) of what Blue Shield pays in Maryland, the total Blue Cross/Blue Shield payment can be roughly estimated as $227 million 1979, and the average benefit payment can be estimated as $170.36. Then, applying the national percentage of Blue Shield's average benefit payment to the payment under all insurors, benefit expenditures per enrollee in Maryland can be estimated for all private insurors and correspondingly, the total benefit payment made by all private insurors can be derived.

‖ Although out-of-pocket expenditure in Maryland is thus found to be almost half that in the U.S. as a whole, this seems to be a reasonable estimate in view of a higher than average insurance coverage and insurance payments per enrollee in Maryland. Also, Maryland's estimate is comparable with an estimate made for the greater Philadelphia area of 25 percent in the year 1973. *Funds Flow III: Health Expenditures in the Philadelphia Area During 1973*, Philadelphia Health Management Corporation, January 1976.

Editorial

Many Unanswered Questions

The preceding article by Joy Basu PhD dealing with a study of physician income and its sources for Maryland raises as many questions as it answers. In an era of decreasing amounts of money to finance the growing cost of sophisticated health care, any study of physician income would be an important cog in the review of health expenditures. As the author correctly points out, the availability of suitable statewide data in Maryland is a major bottleneck in this venture. Nevertheless, the author measured the income expenditures for physician services in Maryland between the years 1975 to 1980 and attempted to apply national percentages to fill in gaps in state data. The result is an approximation of physician income that suffers from several limitations in the data gathering, not the least being the period of the study. It would be foolish for health planners to budget in 1986 using data that may have been close to accurate in 1975 to 1980.

The author claims to have conducted a special study on nonfederal practitioners, focusing on office-based practitioners because physician income earned in hospitals usually is treated as a part of expenditures of hospital services. If that is the case, one must question why the author includes general surgeons, obstetricians-gynecologists, anesthesiologists, and radiologists in the data base since the bulk of their income is based on services provided in a hospital setting. The author also suggests that in addition to presenting the sources and the uses of the statements, the implications of the sources of physician income are fully explored. They must be fully explored in another manuscript because I could not find the explanation despite my digging through this one.

The author's methodology consisted of multiplying the number of physicians by their average gross business receipts to arrive at the total gross business receipts of physicians in each specialty. The problem with this approach is that the data used to derive the average gross income of physicians were not data from the state of Maryland but rather from the South Atlantic census region that includes the states of Delaware, Florida, Georgia, North Carolina, South Carolina, Virginia, West Virginia, Maryland, and the District of Columbia. The average gross business receipts for any of the surveyed specialists in this area may not reflect the average business receipts for Maryland physicians. The author suggests that the South Atlantic region tends to have lower medical costs in general, and, therefore, these estimates may be biased downward. Where is the evidence that Maryland physician costs are higher than those in any other states in the census area?

Another deficiency noted by the author was the fact that only eight specialty categories were covered by the AMA in their survey of average net income and expenditure for physicians, therefore, this survey focused on those eight specialties that constituted about 70 percent of the total physician population in Maryland and treated the remaining twenty-six specialties in an aggregate fashion. Four of the eight specialties surveyed earn the vast bulk of their income in a hospital-practice setting and cannot be considered office-based practitioners.

The author concludes that while the physician supply of general practitioners increased at a mere 1.48 percent annual average rate, the per capita income of general practitioners rose at the second highest rate in the sample group (11.2 percent). What are the reasons for this divergence? Is one reason perhaps that more specialists are delivering primary care and are being compensated at primary care levels thereby driving down their relative rate of increase in reimbursement?

The author concludes that Internal Medicine and General Practice are the two specialties that composed the largest share of the income pie, taking in 28 percent of total physician gross income. Does this 28 percent of total physician gross income include only those truly office-based practitioners, or does this income include the anesthesiologist or other physicians providing hospital-based care?

The author notes that the highest proportion of Medicaid money in Maryland is spent for reimbursement to general practitioners. Where did emergency physicians get factored into the equation? If they bill for patient care out of a private office, were they lumped with the general practitioners? During the survey period emergency physicians were joining the group of other hospital-based specialists beginning their own fee-for-service billing and leaving the hourly (or percentage of the gross) hospital-based contracts. The author notes that for the three primary care specialties (General Practice, Internal Medicine, and Pediatrics) Medicaid payments are almost double their Medicare payments. Of what significance is this? Where is the thorough analysis? The author also notes the highest proportion (23.5 percent) of Medicare money is paid to Internists and the lowest (0.1 percent) to Pediatricians. What is surprising about these figures? It would be surprising if the figures were any different than they are.

Noting that in Maryland, Medicare reimbursement for primary care physicians increased at a higher rate than that at which Medicare payments to all physicians increased, she states that for the nation as a whole the opposite has been true. What are the thoughts on why this occurred? The author includes tables to depict percentages of income received by various specialists, yet in Table 3 and in Table 5 she does not include Family Practitioners. One wonders how any survey of office-based practitioners could be complete without including Family Practitioners. A footnote to Table 3 indicates the sum of money that would be involved if Family Practitioners were included in the total. Table 4, dealing with payments to Maryland office-based phy-

sicians in Medicare and Medicaid includes payment for certain hospital-rendered services.

After studying this manuscript and its revisions, and recognizing the amount of time and effort that must have gone into the preparation of this data, I am left with one pressing question: How much did this study cost the Maryland Health Resources Planning Commission?

JAMES G. ZIMMERLY **MD, JD, MPH**

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Editorial

Hypothermia

The magnitude of hypothermia as a cause of mortality in the United States is difficult to establish but is probably underreported. It occurs in patients of all ages from immature neonates to the aged.[1] General causes of hypothermia include: accidental or environmental, drug or alcohol associated exposure, endocrine diseases, central nervous system disorders with loss of temperature control, sepsis, severe dermal disease, and acute myocardial infarction with low cardiac output.[2-4] Environmental factors (accidental overexposure and ethanol) are major etiologies, either alone or in combination in older age groups. Sepsis and suboptimal ambient temperatures are major causes of hypothermia in neonates.[5]

Hypothermia exists when body temperatures drop below 35 degrees Centigrade (95 degrees Fahrenheit). The development of this symptom calls forth a physiologic response by which the body attempts to both retain and generate heat. This is accomplished by peripheral vasoconstriction, shivering, and neuroendocrine responses that raise the basal metabolic rate. In this responsive stage, core temperatures are between 32 degrees Centigrade (90 degrees Fahrenheit) and 35 degrees Centigrade (95 degrees Fahrenheit). With lowering of core temperature below 32 degrees Centigrade (<90 degrees Fahrenheit), there is a reduction in the metabolic rate, loss of shivering, and a reduction of respiration, cardiac rate, and cardiac output. As the temperature drops further there is an increase in myocardial irritability, which can lead to complications with or without therapy. Alteration in the mental status progresses from confusion to coma.

Finally, at core temperatures below 25 degrees Centigrade, profound respiratory depression and ventricular fibrillation terminating in asystole are apt to develop. Other physiologic abnormalities include: metabolic acidosis, hypoxemia, hemoconcentration, and either hypo- or hyperglycemia. All of these changes may be affected by an underlying disease.[2,3,6] Disseminated intravascular coagulation (DIC) has occurred in hypothermic infants but rarely has been reported in adults.[7] Sabapathi *et al.* report on this complication in an article beginning on the next page.

Hypothermia should be thought of as a preventable disease, but when it is diagnosed, prompt, effective treatment of both the underlying cause and the hypothermic state is of paramount importance. For hypothermia, rewarming, careful monitoring, and appropriate supportive measures are the mainstays of management. Rapid rewarming for patients of all ages appears to be most favored whether accomplished passively or by active external or central techniques, but methods may vary with the cause of and the degree of hypothermia. These treatment modalities are not without complications.[2,3,8,9] While the patient reported by Sabapathi *et al.* gave evidence of DIC prior to therapy, DIC may also develop as a consequence of rewarming. Since DIC may respond to vigorous treatment, it would be wise to include a coagulation profile in the studies obtained initially and during management of patients with hypothermia.

FREDERICK J. HELDRICH MD

References

1. "Hypothermia-United States." *MMWR* 32(1983):46–48.
2. Wilkins, E.W., Jr.; Dineen, J.J.; Moncure, A.C.; and Gross, P.L. (eds). *MGH Textbook of Emergency Medicine*, ed 2. Baltimore: Williams & Wilkins, 1983, pp. 181–85; 636–38.
3. Beesen, H.A. "Hypothermia" in Tintinalli, J.E.; Rothstein, R.J.; and Krome, R.L. (eds). *Emergency Medicine: A Comprehensive Study Guide.* New York: McGraw Hill Book Company, 1985 pp. 334–38.
4. Doherty, N.; Ades, A.; Shah, P.K.; and Siegel, R.J. "Hypothermia with Acute Myocardial Infarction." *Ann Int Med* 101(1984):797–98.
5. Dagan, R. and Gorodischer, R. "Infections in Hypothermic Infants Younger than 3 Months Old." *Am J Dis Child* 138(1984):483–85.
6. Morris, D.L.; Chambers, H.F.; Morris, M.G.; and Sande, M.A. "Hemodynamic Characteristics of Patients with Hypothermia Due to Occult Infection and Other Causes." *Ann Int Med* 102(1985):153–57.
7. Mahajan, S.L.; Myers, T.J.; and Baldini, M.G. "Disseminated Intravascular Coagulation During Rewarming Following Hypothermia." *JAMA* 245(1981):2517–18.
8. Kaplan, M. and Eidelman, A.I. "Improved Prognosis in Severely Hypothermic Newborn Infants Treated by Rapid Rewarming." *J Pediatr* 105(1984):470–74.
9. Zell, S.C. and Kurtz, K.J. "Severe Exposure Hypothermia: A Resuscitation Protocol." *Ann Emerg Med* 14(1985):339–45.

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Complete Recovery from Profound Hypothermia Associated with DIC

RAMESH SABAPATHI MD, CHARLES RIDLEY MD, and MICHAEL C. YEN MD

Disseminated intravascular coagulation (DIC) associated with profound hypothermia is an uncommon complication in adults. This report describes a 50-year-old male in whom DIC developed during the rewarming phase of accidental hypothermia. He recovered completely.

From the Department of Medicine, Maryland General Hospital, Baltimore. Dr. Sabapathi is Co-Chief Resident at Maryland General, Dr. Ridley is now in private practice in Georgia, and Dr. Yen is the Chief of Medicine and Program Director at Maryland General Hospital. Reprint requests: Ramesh Sabapathi MD, Department of Medicine, Maryland General Hospital, 827 Linden Avenue, Baltimore, Maryland 21201.

Accidental hypothermia secondary to prolonged exposure to low environmental temperature is common during winter.

Disseminated intravascular coagulation has been recognized as a complication of hypothermia in neonates but rarely has been reported in adults. We recently encountered a case of DIC following profound hypothermia. Since it is a major cause of morbidity and mortality in such patients, we conclude that coagulation studies should be a part of the initial evaluation of patients with profound hypothermia and should be repeated early in the hospital course of these patients.

Case Report

A healthy, 50-year-old male was brought to the hospital unconscious. Upon arrival at the hospital, his rectal temperature was 74°F. The patient was totally areflexic; the pupils were fixed and dilated. CORE temperature elevation was rapidly and progressively undertaken with warm extracorporeal blood, and peritoneal and gastric lavage. Four hours after arrival, spontaneous bleeding developed from the gastrointestinal and venipuncture sites.

The patient had a series of measurements of the following coagulation studies: platelet count performed by thrombocounter (Coulter S plus); prothrombin time done on a MLA 700 thromboplastic (Dade Co.); activated partial thromboplastin time done on a MLA 700 Actin (Dade Co.); and fibrinogen degradation products measured in μg/ml of fibrinogen equivalents with the thrombo-Wellcotest (Wellcome Research Laboratories). All pertinent data are summarized in the Table.

Therapy with packed RBCs, fresh frozen plasma, and cryoprecipitate was initiated immediately after DIC was suspected. The bleeding stopped, and all the coagulation studies returned to normal. The patient was discharged completely recovered.

Discussion

Accidental hypothermia secondary to prolonged exposure to low environmental temperatures is not uncommon during winter. The record occurrence is highest in Great Britain where it is estimated that up to 2,000 elderly persons die of this condition each year. The mortality rate of 6.5 percent among hypothermic alcoholics approaches the mortality of pure, uncomplicated hypothermia. However, the mortality rate of 60 to 100 percent in other studies may represent mortality due to underlying disease and complications associated with hypothermia.[1]

The mortality associated with hypothermia is proportional to the degree of hypothermia and the time taken to rewarm the patients to normal or near-normal temperatures. Temperature elevation can be achieved by passive, active external and active core rewarming. Passive method uses endogenous heat production by the body while conserving heat loss. The disadvantage of this method is that the rewarming is slow. Active external rewarming includes immersion of the trunk in a hot water tub (104 to 110°F) and by using hyperthermia blankets. The disadvantages of this method are (a) it is often cumbersome, and (b) heat-induced cutaneous vasodilation may lead to hypotension and shock. Active core rewarming is indicated in core temperatures of less than 32°C. This includes infusion of warmed blood and

Table. Laboratory Data

	Admission	Discharge
Protime 11.2–13.2 seconds	17.4	11.6
PTT 20–31 seconds	42.2	24.1
Fibrinogen 170–410 MG/DL	89	Not Available
FSP 4.9 ± 2.8 MCG/ML	40 MCH/ML	Not Available
Platelet 130–400 (10^3/mm^3)	18,000	70,000
SGOT 13–39 U/L	1,386	77
SGPT 4–28 U/L	216	59
Bilirubin 0.1–1.1 MG/DL	4.6	1.8
Alk Phos 20–91 U/L	119	154

I.V. fluids (heated to approximately 40°C with blood warming coil), peritoneal dialysis with warmed dialysate, inhalation of warm humidified oxygen, gastric and colonic irrigation with warmed saline, and finally when facilities are available, partial cardiopulmonary bypass with a heat exchange. Active core rewarming is definitely superior to other methods and is not complicated by shock and hypotension, which often follow external rewarming.

The effect of hypothermia on coagulation studies has been well recognized in experimental animals. The changes in coagulation factors occurring in dogs in association with hypothermia were ascribed to intravascular coagulation.[2,3]

The association of disseminated intravascular coagulation with hypothermia in humans was largely reported in neonates but rarely has been reported in adults.[4–7]

The mechanisms producing disseminated intravascular coagulation in patients with profound hypothermia are not clear. They may be multifactorial. Johansson and Nilsson found thrombocytopenia, a decrease in fibrinogen production and Factor VII, and an increased fibrinolytic activity in hypothermic dogs. They concluded that the coagulation defects induced by hypothermia are due mainly to intravascular coagulation. The decrease of fibrinogen, which takes place in connection with hypothermia, is due to its consumption in the coagulation process and is not caused by the fibrinolytic process.[3]

Secondly, profound tissue damage could be expected in hypothermic patients, from which vascular endothelial injury and release of tissue thromboplastin could activate both coagulation pathways. Therefore, Mahajan *et al.* speculated that rapid rewarming caused large amounts of tissue thromboplastin to be mobilized from damaged tissue into the circulation, and this accounts for the fulminant nature of DIC.[7,8] Finally, the similarities between the above patient and others is striking, especially in the consistently high incidence of chronic alcohol abuse and active liver disease. There are several causes of abnormal coagulation associated with liver disease, including impaired synthesis of coagulation factors,[9,10] primary fibrinolysis due to impaired hepatic clearance of plasminogen activator, deficient synthesis of fibrinolytic inhibitors,[11,12] and disseminated intravascular coagulation as a result of decreased hepatic clearance of activated clotting factors or procoagulant activity liberated into the circulation.[13–15]

The experience with treatment of DIC associated with hypothermia is scarce. It is mainly symptomatic, and this includes infusion of fresh frozen plasma and treating underlying infection. Patients also should receive vitamin K due to the high incidence of alcoholism and active liver disease among patients suffering from hypothermia. Although heparin treatment may be of tremendous value in some patients with disseminated intravascular coagulation, it may actually harm others.[16,17] We believe heparin should be given to only patients with thrombotic disease such as pulmonary embolism or peripheral ischemic changes associated with DIC.

Since DIC is a major cause of morbidity and mortality in hypothermic patients, we conclude that coagulation studies should be a part of the initial evaluation of patients with profound hypothermia and that these studies should be repeated early in the hospital course of these patients.

Acknowledgment

The assistance of the health care team at Maryland General Hospital is acknowledged.

References

1. Weyman, A.E.; Greenbaum, D.M.; and Grace, W.J. "Accidental Hypothermia in an Alcoholic Population." *Am J Med* 56(1974):13–21.
2. Sands, M.P.; Mohri, H.; and Sato, S. "Hamatorheology during Deep Hypothermia." *Cryobiology* 16(1979):229–39.
3. Johansson, B.W. and Nilsson, I.M. "The Effect of Heparin and E-AminoCaproic Acid on the Coagulation in Hypothermic Dogs." *Acta Physiol Scand* 60(1964):267–77.
4. Chadd, M.A. and Gray, O.P. "Hypothermia and Coagulation Defects in the Newborn." *Arch Dis Child* 47(1972):819–21.
5. Cohen, I.J. "Cold Injury in Early Infancy: Relationship Between Mortality and Disseminated Intravascular Coagulation." *Isr J Med Sci* 13(1977):405–409.
6. Mahood, J.M. and Evans, A. "Accidental Hypothermia Disseminated Intravascular Coagulation and Pancreatitis." *NZ Med J* 87(1978):283–84.
7. Mahajan, S.L.; Myers, T.J.; and Baldini, M.G. "Disseminated Intravascular Coagulation during Rewarming Following Hypothermia." *JAMA* 245(1981):2517–18.
8. Kwaan, H.C. "Disseminated Intravascular Coagulation." *Med Clin North Am* 56(1972):177–919.
9. Ratnoff, O.D. "Hemostatic Mechanisms in Liver Disease." *Med Clin North Am* 1(1962):967–75.
10. Donaldson, G.W.K.; Davies, S.H.; Doug, A.; *et al.* "Coagulation Factors in Chronic Liver Disease." *J Clin Path* 22:199–204.
11. Bloom, A.L. "Intravascular Coagulation and the Liver." *Br J Haematol* 30(1975):1–7.
12. Tytgat, G.N.; Collen, D.; and Verstraete, M. "Metabolism of Fibrinogen in Cirrhosis of the Liver." *J Clin Invest* 50(1971):1690–1701.
13. Rake, M.O.; Pannell, G.; Flute, P.T.; *et al.* "Intravascular Coagulation in Acute Hepatic Necrosis." *Lancet* 1(1970):533–37.
14. Coleman, M.; Finlayson, N.; Bettigole, R.E.; *et al.* "Fibrinogen Survival in Cirrhosis: Improvement by Low Dose Heparin." *Ann Intern Med* 83(1975):79–81.
15. Harmon, D.C.; Demirjian, Z.; Ellman, L.; *et al.* "Disseminated Intravascular Coagulation with the Peritoneovenous Shunt." *Ann Intern Med* 90(1979):774–76.
16. Rake, M.O.; Shilkin, K.B.; Winch, J.; *et al.* "Early and Intensive Therapy of Intravascular Coagulation in Acute Liver Failure." *Lancet* 2(1971):1215–18.
17. Weskey, C. "DIC: Identification and Management." *Hosp Pract* Dec (1982):83–93.

These two articles are excellent reviews on hypothermia:
Stine, R.J. "Accidental Hypothermia." *JACEP* 6(1977):9.
Reuler, J.B. "Hypothermia: Pathophysiology, Clinical Settings and Management." *Ann Intern Med* 89(1978):519–27.

MIEMSS: Topics of Interest

The Banking and Clinical Use of Human Skin Allograft in Trauma Patients: Clinical Use of Allograft Skin

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The use of human skin allograft (HSA) biological dressings in burn patients has become commonplace, since Brown[1] established it as routine and particularly since the establishment of skin banks in the late 1960s.

During the Viet Nam War, Shuck reported that the benefits derived from the use of HSA biologic dressings by burn patients were also realized by patients with nonburn traumatic wounds.[2,3] No similar reports of its use in large nonburn traumatic wounds have been published since then. This may be due to the absence of a similar concentration of patients with large traumatic wounds or simply to the dearth of HSA because of its great demand in the care of burn patients.

This article reviews the clinical experience with banked HSA as it is being used in Maryland and reintroduces the concept of its use in the nonburn wound, particularly in the setting of a major trauma center.

The Maryland Tissue Bank is unique in that it was established, in part, to provide easy availability of HSA for biological dressings to care for nonburn trauma patients concentrated in the Maryland Institute for Emergency Medical Services Systems (MIEMSS) (Shock Trauma).

The benefits of HSA as a biological dressing in burn wounds, originally outlined by Zaroff *et al.*,[4] are listed in the Table. The application of viable HSA biological dressings *closes the wound . . . temporarily*. The patient and the wound are deceived into believing that the wound has been closed by its own skin graft (autograft). This deception continues as long as the HSA is changed frequently (that is, every 5 to 7 days) to avoid incorporation into the wound and rejection.

Table. Benefits of Human Skin Allograft Biological Dressings

1. Limits infection and keeps the bed mechanically clean.
2. Decreases water, electrolyte, and protein loss.
3. Decreases energy requirements secondary to the calories necessary for the large obligatory loss of free water through the open wound.
4. Reduces pain, allowing exercise and ambulation, and decreases the incidence of contractures.
5. Conserves autograft.
6. Improves appetite and general welfare.
7. Improves psychological outlook of the patient.

From Zaroff, L. I. *et al.* "Multiple uses of viable cutaneous homografts in the burned patient." *Surgery* 59(1966):368.

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Nonburn Wounds

These benefits are of great clinical value in several types of nonburn wound situations. Case histories illustrate these situations and further expand the recognized and newly found advantages of wound coverage with viable HSA.

Case I: A 38-year-old steel worker was admitted to the MIEMSS Shock Trauma Center after his right leg was caught in a high-speed steel spooling device. The incident resulted in a crushing and degloving injury of his leg below the knee (Figure 1A). An immediate operation was performed to determine the extent of injury, to remove the obviously devitalized tissue, and to cover the resulting extensive wound with banked HSA. The exposed posterior tibial neurovascular bundle was carefully covered in an attempt to preserve sensibility of his foot (Figure 1B, next page).

The patient had minimal pain in the postoperative period because his wound was closed. After one further operative debridement of nonviable tissue and two changes of the HSA dressing, the patient was returned to the operating room 13 days after injury. Upon removing the allograft dressing, the wound bled as if removing a several-day-old autograft, indicating "take" of the allograft. There was no granulation tissue in the wound, and there was minimal edema in the tissues. The posterior tibial neurovascular bundle and the tendons that had been exposed by the injury were preserved in good condition. A latissimus dorsi free flap was used to reconstruct his lower leg using microvascular surgery,

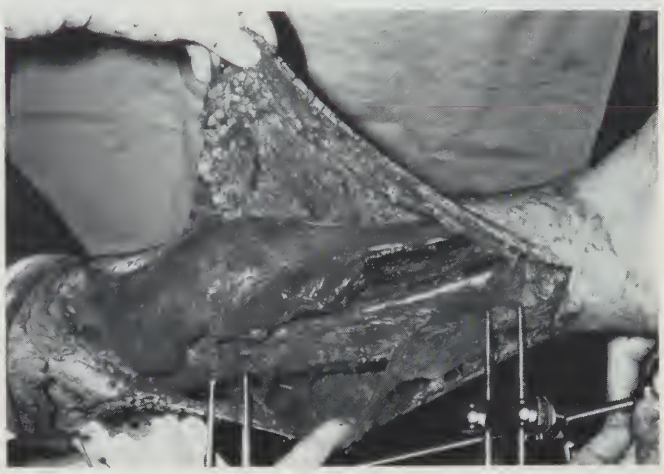


Figure 1A. Case I—Initial exploration of degloving injury of right lower leg.



Figure 1B. Case I—Circumferential wound closed with allograft. Note posterior tibial neurovascular bundle covered in distal recess.



Figure 1C. Case I—Leg reconstructed with free latissimus dorsi flap and covered with autograft.



Figure 1D. Case I—Healed wound 3 months after injury.

and all was autografted (Figure 1C). The reconstruction healed well, the limb was salvaged, the patient walks on his leg, and his foot has essentially normal sensibility (Figure 1D).

In this case, the allograft skin maintained the wound as physiologically closed from just a few hours after injury until the time of reconstruction. This resulted in minimal pain and maintenance of a pristine wound. The HSA began taking to the wound, indicating the absence of necrotic tissue and infection. The absence of granulation tissue adds credence to the suggestion that such tissue is a response to bacteria and other noxious substances that come in contact with an open wound. HSA dressings prevent such contact.

Case II: A four-year-old child was transferred to the University of Maryland Hospital after falling under a riding lawn mower. She sustained multiple fractures and a huge, longitudinal wound of her leg (Figure 2A). An immediate operation was performed to debride her wound and close it with HSA (Figure 2B). She was returned to the operating room twice more for re-examination, debridement, and replacement of HSA dressings under general anesthesia. Between trips to the operating room, her dressings were not disturbed and the child did not complain of pain.

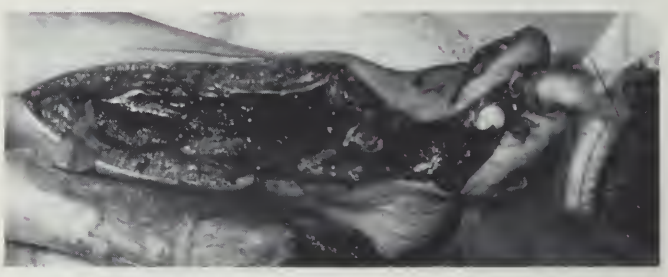


Figure 2A. Case II—Initial exploration of left lower leg wound.

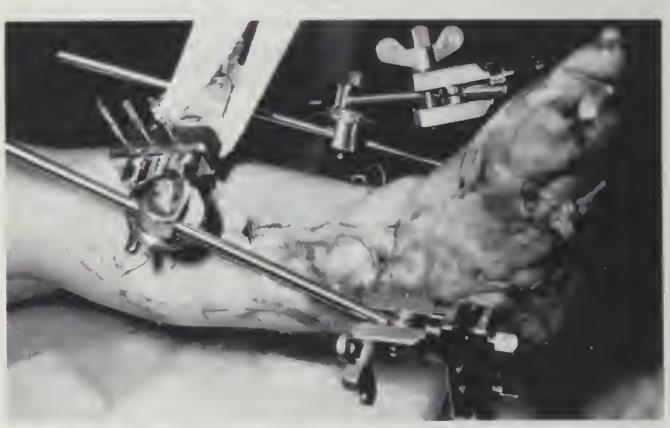


Figure 2B. Case II—Wound closed with allograft.

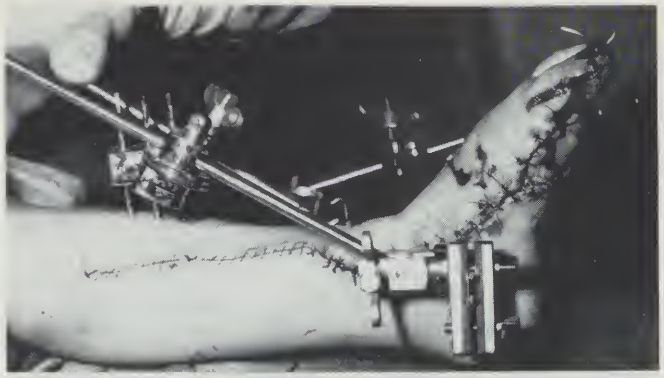


Figure 2C. Case II—Delayed primary closure 7 days after injury.

On the seventh postinjury day, her wound was clean, had no remaining nonviable tissue, no granulation tissue, and minimal swelling. A delayed primary closure was therefore performed (Figure 2C). The wound healing was uncomplicated, and it was possible to discharge the patient 10 days after her injury. She remained healed and did well in follow-up (Figure 2D).

As in the first case, this wound was physiologically closed using allograft skin dressings immediately after its initial debridement. Not only did this lead to rapid resolution of edema and prevent granulation tissue, but also it had the added benefit of freedom from pain and no dressing changes while this four-year-old was awake. The former allowed early closure with assurance of no infection. The latter minimized the trauma of the experience.



Figure 2D. Case II—Appearance of leg 9 weeks after injury.

Case III: A 58-year-old male engineer suffered multiple injuries in a motor vehicle accident. He sustained multiple facial lacerations and a grade III (open), comminuted tibial plateau fracture (Figure 3A). In the operating room, he underwent repair of his facial lacerations and Kirschner wire fixation of the tibial plateau fragments (Figure 3B). An amputation was contemplated in view of the severity of his injury. Instead, banked HSA was used to cover the exposed periosteum and joint cartilage temporarily until all devitalized tis-



Figure 3A. Case III—Comminuted fracture of right tibial plateau.



Figure 3B. Case III—Fracture reduced.

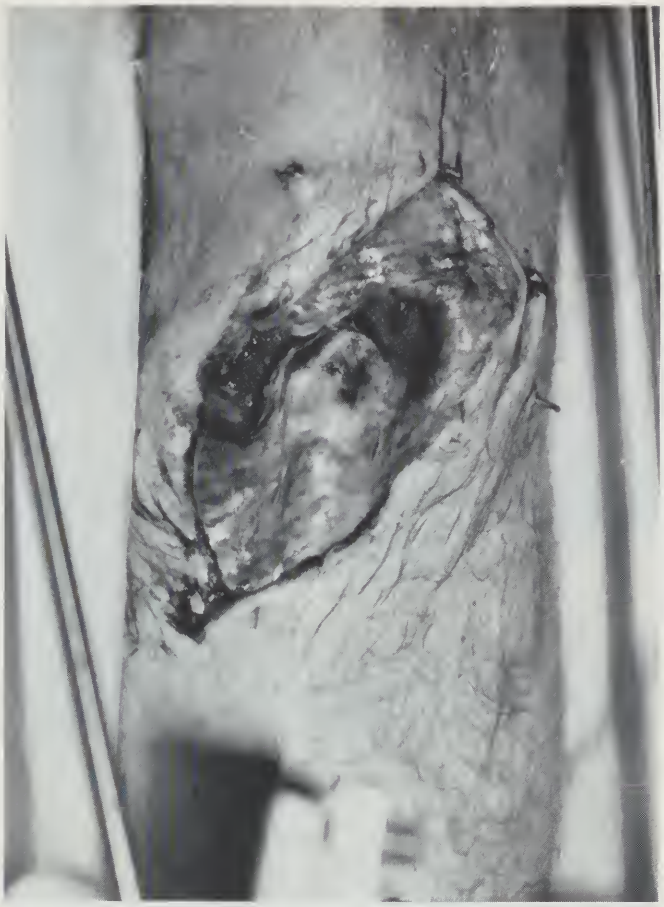


Figure 3C. Case III—Wound closed with allograft.

sue was debrided over the next several days (Figure 3C). One week later the wound was clean and the allograft was adhering to its surface prior to closure with a medial gastrocnemius myocutaneous flap. The flap healed successfully (Figure 3D).

After the limb was salvaged, the patient underwent bone grafting and knee fusion. He was fully ambulatory ten months following his injury.

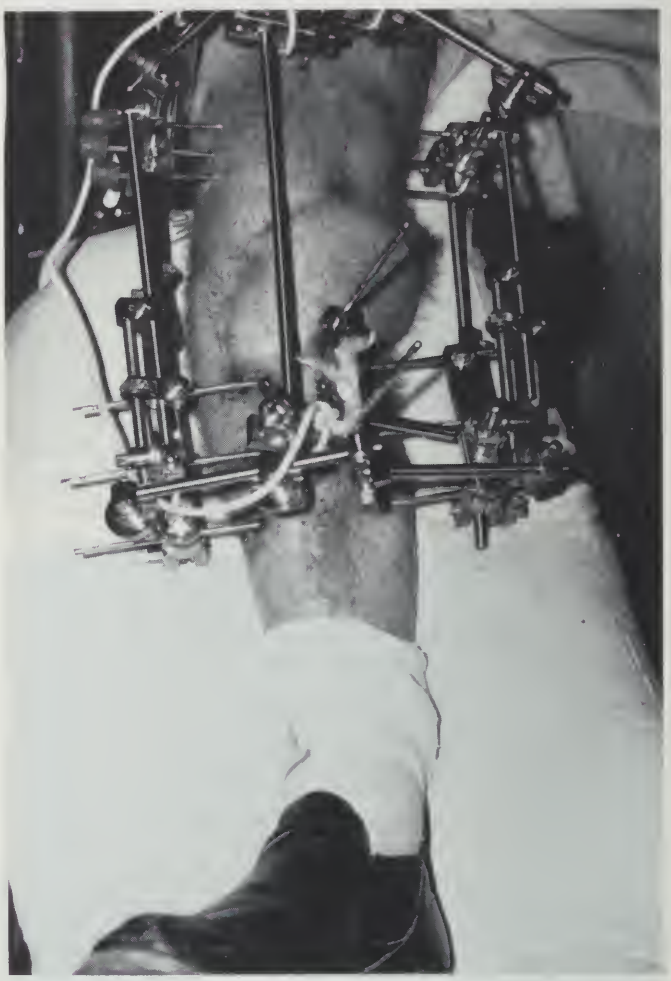


Figure 3D. Case III—Salvaged leg 8 months after injury.

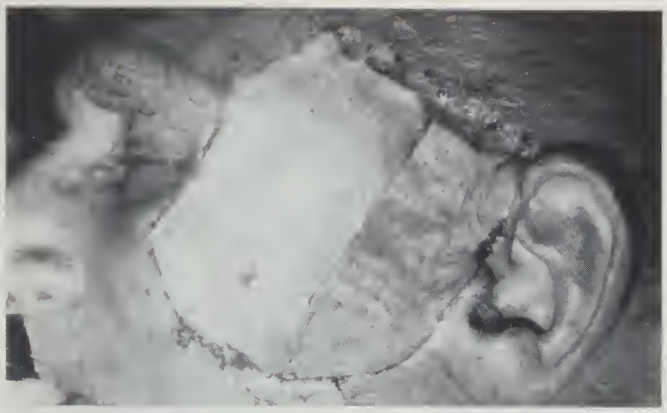


Figure 4A. Case IV—Allograft adherent to facial wound except on superior 1 cm.



Figure 4C. Case IV—Blanching of central capillaries with pressure from glass tube 3 days postoperative.

Case IV: An 89-year-old retired male was referred from dermatology after a Moh's histographic surgical excision of a large basal cell carcinoma of his lateral face. The surgery had been completed four days prior to his visit. He had a 10 × 7 cm granulating wound extending from his left ear to the lateral orbital rim and covering virtually all of his lateral temporal and zygomatic regions.

His wound was cleaned and an HSA dressing was placed. The patient was discharged to return in three days for reconstruction of his lateral face.

The patient was admitted to the hospital two days later. The HSA dressing was adherent over the entire wound, with the exception of the superior margin, where purulence was present under approximately 1 cm of the allograft (Figure 4A). This margin was debrided and cleansed.

The following day the patient was taken to the operating room, where the superior margin was excised and a full-thickness autograft from his neck and shoulder was used to close the wound. The allograft was removed just prior to placing the autograft, revealing a clean, richly vascular bed.

The dressing was removed from the full-thickness autograft on the third postoperative day. The autograft was found to be not only adherent but also completely



Figure 4B. Case IV—Vascularized full-thickness autograft 3 days postoperative. Note that superior 1 cm is not well vascularized.

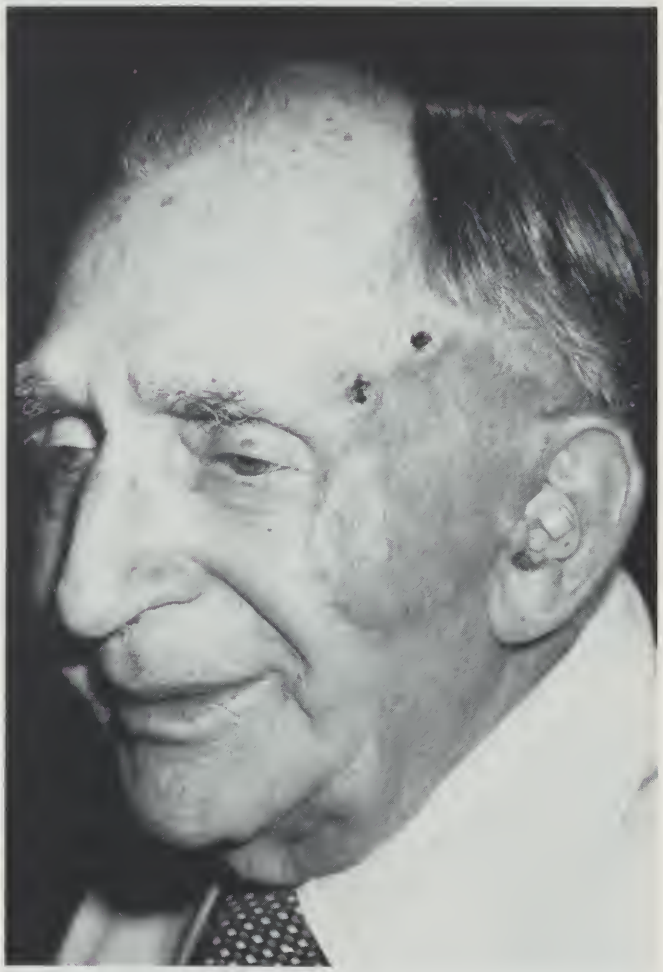


Figure 4D. Case IV—Appearance 1 month postoperative. (Used with permission.)

vascularized, as demonstrated by the visible capillaries that blanched with pressure and refilled (Figures 4B and 4C). The superior margin was the only aspect of the autograft that looked like a typical three-day-old full-thickness skin graft, still being white and poorly vascularized. The patient went on to heal completely with a good cosmetic result (Figure 4D).

This case demonstrates HSA's remarkable ability to



Figure 5A. Case V—Chronic wound of right foot prior to excision.



Figure 5B. Case V—Allograft applied to ulcer excision wound.



Figure 5C. Case V—Brisk bleeding after removal of allograft 11 days after initial allograft application.

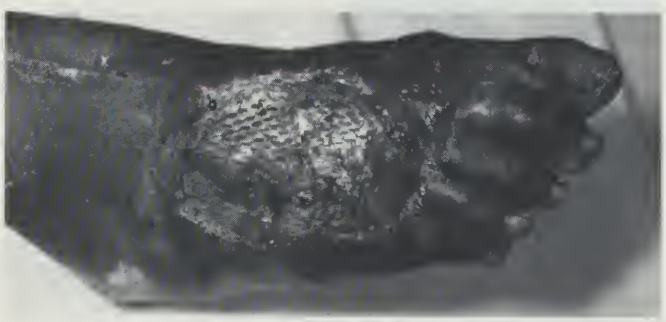


Figure 5D. Case V—Appearance of foot 3 weeks after autografting.

prepare an open wound for either delayed primary closure or autograft closure. Allograft cleans the wound to some degree and stimulates neovascularization; once closed, the wound has the same tensile strength as if it had been closed primarily.[5] Furthermore, one must speculate that there may be even more than this going on biochemically to result in such rapid healing and revascularization, as was seen in this case.

Case V: A 44-year-old female presented with a chronic open wound of the dorsum of her right foot, which first occurred after relatively minor trauma five years previously. Several split-thickness autografts had been attempted at other hospitals, but none completely healed before failing. The patient did not have diabetes mellitus.

The foot was edematous. A 9 × 6 cm chronic ulcer was present on its dorsum (Figure 5A). Pulses were detected by Doppler but could not be palpated. The left foot had palpable pulses.

The ulcer was excised and the dorsalis pedis artery was explored for suitability for a free flap. The flow in this artery was found to be inadequate to sustain a free flap. An HSA was then placed to test the remaining wound for vascularization and potential autograft take with the hope of salvaging the foot (Figure 5B).

The allograft did adhere and became vascularized; when the allograft was changed on the sixth day, the wound bled surprisingly well, and there was no apparent infection. The patient was returned to the operating room 11 days after excision of the ulcer, where the allograft was removed revealing a clean, bleeding bed (Figure 5C). A split-thickness autograft was placed. The wound healed completely (Figure 5D). The patient was discharged and followed for three months with no recurrence of the ulcer.

This case demonstrates the value of banked allograft skin as a test for the potential take of the patient's own skin graft. This avoided the common clinical problem of wasting the patient's own skin with repeated autograft failures while keeping the wound in a physiological environment protected from bacteria. If the allograft had not taken in the absence of any other obvious problems preventing the take, we could have been quite certain the vascularization was too poor to sustain either an autograft or a distant flap such as a cross-leg flap.



Figure 6A. Case VI—Open abdominal wound prior to allografting. Note the exposed liver in right aspect of wound, granulation tissue over bowel, and exposed vascular graft over pubis to left.

Case VI: A 51-year-old female diabetic was admitted to the vascular service with severe abdominal pains of 12 hours' duration. Two weeks prior to admission, the patient had undergone an aortobifemoral vascular bypass for severe claudication. Her evaluation was confounded by her recent abdominal procedure and the history of some abdominal pain in the postoperative period.

Shortly after admission, she was taken to the operating room, where she was found to have a ruptured appendix with an abscess contaminating her vascular graft. The vascular graft was removed and a right axillobifemoral bypass graft was performed after treating the abscess.

Subsequently, the patient's abdominal wound dehisced. The wound margins became infected and had to be widely debrided when a pelvic abscess was drained per rectum ten days after the original procedure. By the time all necrotic wound margins had been debrided, the patient had lost most of her anterior abdominal wall, exposing her intraabdominal contents (Figure 6A). The bifemoral portion of her vascular graft became exposed over the pubis in the inferior aspect of the abdominal wound, and she was gravely ill.

At this point, banked HSA was placed over the huge abdominal wound to close the wound temporarily and to test the wound for potential autograft take (Figure 6B). There was an immediate, dramatic change in the patient's fluid requirements, ease of controlling her diabetes, and general clinical course.

Four days later, the allograft was adhering to her wound, and it was possible to take her to the operating room, where the allograft was removed revealing a bleeding surface ready for autografting (Figure 6C). An autograft was placed on the abdominal wound, and a gracilis muscle flap was transposed over the exposed vascular prosthesis in an effort to salvage it. The pedicle of the muscle flap was covered with HSA.

The patient continued to do relatively well during this time. Her autografts went on to completely heal (Figure 6D).



Figure 6B. Case VI—Abdominal wound closed with allograft.

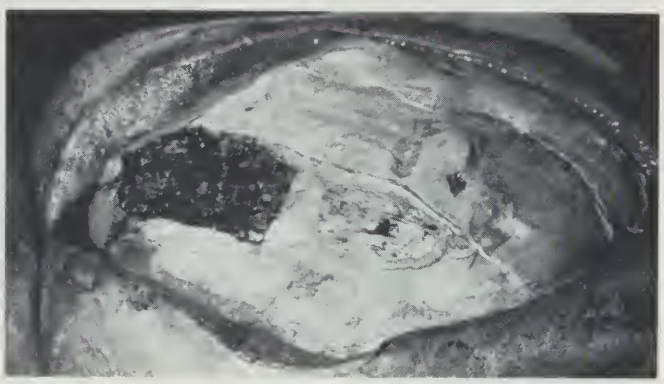


Figure 6C. Case VI—Bleeding of wound when allograft was removed.

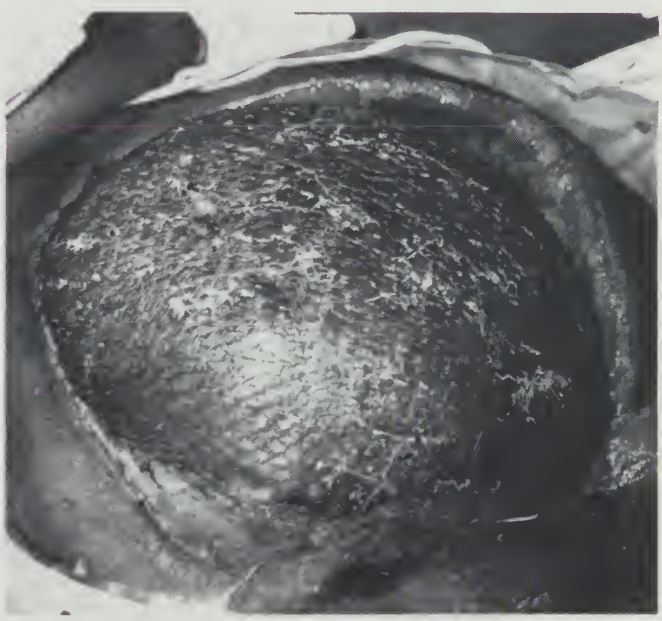


Figure 6D. Case VI—Healed abdominal wound 17 days after allografting and 13 days after autografting.

Despite the clinical improvement at the time of her abdominal wound closure, the patient subsequently lost both her legs to infection of her vascular grafts in the groin. She died two months later from recurrent sepsis. Although the outcome was adverse, this case presents two further examples of how banked HSA can be used to the patient's benefit.

• • •

Along with burn wounds, the most awesome wounds a surgeon must manage are those resulting from the debridement of necrotizing fasciitis. These wounds, like burn wounds, are best treated with early closure after infection and necrosis are controlled by debridement. Allograft does this rapidly, at the bedside if necessary, and still allows the surgeon to inspect the wound to rule out further necrosis. Inspection can be done knowing that if the allograft has to be disturbed, it can be replaced easily with the same or another piece of allograft.

HSA coverage of the muscle flap pedicle demonstrates its use to cover tissues exposed during an operative procedure to preserve the tissue in a physiological medium. The best example of such a use is the coverage of fasciotomy wounds with HSA until the swelling subsides and delayed primary closure can be accomplished over a bed that has no granulation tissue.

Discussion

Human skin allograft can be an invaluable tool in the management of severe traumatic wounds.

In patients with severe burn wounds, the problems of resuscitation and early infection have been resolved adequately by advances in fluid management, monitoring, and antibiotics. The current challenge is how best to remove all the destroyed skin early, to cover the resulting wound to prevent burn wound sepsis, and to obtain optimal function of the replaced skin. HSA plays a key role in this when autograft donor sites are limited. Even when extensively burned patients are grafted with their own epidermal cells grown in tissue culture, they must be covered and therefore kept alive with skin allograft while their cells are being cultured.[6]

Similarly, the greatest challenge for those dealing with nonburn traumatic wounds is how to manipulate a very large or otherwise problematic wound to heal most quickly and with the least morbidity to the patient. We have demonstrated in this report how HSA can be used for this.

The concentration of a large number of trauma patients at the MIEMSS Shock Trauma Center provides ample acquaintance with nonburn wounds. We have applied lessons learned from burn wound care with biological dressings to patients with these wounds. The above cases illustrate various ways that allograft skin is of value in these patients. All the benefits ascribed to allograft by Zaroff in burn patients are seen in this set of patients. We have found that HSA can be used to manipulate the wound: to keep it fresh without bacterial colonization and granulation tissue and to prepare a wound resulting in much quicker take and vascularization of subsequent autograft.

Conclusion

The Maryland Tissue Bank is unique in having been established to provide adequate human skin allograft (HSA) not only for the needs of the Baltimore Regional Burn Center but also for the perceived need of patients with nonburn wounds at the MIEMSS Shock Trauma Center.

In the first two articles of this series,[5,7] we concentrated on the history of the use of human skin allograft as a biological dressing, the benefits of its use, and skin banking in Maryland. In this article, discussion of our use of allograft skin in the nonburn trauma patient at the MIEMSS Shock Trauma Center and the University of Maryland Hospital emphasizes the benefits that this group of patients have in common with burn patients from the use of HSA as well as illustrates how allograft skin is used to manipulate wounds to reduce morbidity and to provide more rapid healing.

References

1. Brown, J.B. *et al.* "Postmortem Homografts as 'Biological Dressings' for Extensive Burns and Denuded Areas." *Ann Surg* 138(1953):618.
2. Shuck, J.M. *et al.* "Homograft Skin for Wound Coverage." *Arch Surg* 98(1969):472.
3. Shuck, J.M. *et al.* "Homograft Skin for the Early Management of Difficult Wounds." *J Trauma* 12(1972):215.
4. Zaroff, L.I. *et al.* "Multiple Uses of Viable Cutaneous Homografts in the Burned Patient." *Surgery* 59(1966):368.
5. Spence, R.J. "The Banking and Clinical Use of Human Skin Allograft in Trauma Patients: History." *Md Med J* 35(1986):50.
6. Gallico, G.G. III *et al.* "Permanent Coverage of Large Burn Wounds with Autologous Cultured Human Epithelium." *N Engl J Med* 311(1984):448.
7. Spence, R.J. "The Banking and Clinical Use of Human Skin Allograft in Trauma Patients: The Banking of Allograft Skin in Maryland." *Md Med J* 35(1986):117.

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HBP Commentary

Physician Recognition of CHD Risk Factors in High-Risk Patients

DIANE M. BECKER ScD, BRADLEY O. BOEKELOO ScM, and THOMAS A. PEARSON MD

Identification of coronary heart disease (CHD) risk factors after a coronary event can lead to interventions that will substantially reduce the risk of a second event; such risk-factor identification also can focus primary prevention efforts on high-risk families to alter expected morbidity and mortality from coronary disease and stroke. However, studies among community practitioners and in acute care settings suggest that physicians lag in applying risk-factor evidence from epidemiologic studies and clinical trials to their practices.

The authors are with the Preventive Cardiology Center, Division of Internal Medicine, The Johns Hopkins Medical Institutions. This research was supported in part by the Preventive Cardiology Academic Award from the National Heart, Lung, and Blood Institute (No. K07HL1113-03).

It has long been known that patients with early coronary heart disease (CHD) have a high prevalence of potentially modifiable known risk factors including hypertension, hyperlipidemia, and cigarette smoking. There is strong and consistent evidence that stopping smoking after a first CHD event will reduce the risk of a second event or death by half.[1] While the few studies examining lipid-lowering regimens in CHD patients have not been able to demonstrate a statistically significant reduction in CHD event rate, serial angiographic studies have shown that a significantly lower percentage of hypercholesterolemic patients experienced coronary artery atherosclerotic progression when treated effectively with a lipid-lowering agent and diet.[2] Further, the Lipid Research Clinics Coronary Primary Prevention Trial (CPPT) demonstrated a 19 percent reduction in ischemic heart disease mortality and nonfatal infarcts in hypercholesterolemic men in the seven years of follow-up.[3]

Primary relatives of people with coronary disease at less than 60 years of age have a risk of developing the premature disease themselves of two to twelve times that of the general population. Although there is an independent contribution of unknown genetic factors to familial-clustered coronary disease, a significant portion of the increased risk in close relatives can be accounted for by potentially modifiable known risk factors, both cultural and physiologic, that again aggregate in families.[4,5] Identifying familial-clustered risk factors such as hyperlipidemia at the time of a CHD event in a relatively young person offers a unique opportunity for primary prevention in children and brothers and sisters, an easily identifiable group at exceedingly high risk for developing CHD themselves.

Thus, a strong case can be made for identifying risk factors in young people (<60 years) at the time of a CHD event, both to lower the probability of subsequent events and to identify high-risk families for primary prevention efforts. There is even stronger evidence that identifying people before an event and modifying the major risk factors can alter expected morbidity and mortality from coronary disease and stroke.

How Well Are Physicians Doing?

Studies both among practitioners in the community and in acute care settings suggest that physicians in general may be lagging a bit in applying the evidence from epidemiologic studies and clinical trials to their practices. In 1983, prior to release of the CPPT results, the National Heart, Lung, and Blood Institute surveyed 1,610 randomly selected physicians by telephone to ascertain self-reported practice patterns, attitudes, and beliefs related to risk identification and management.[6] While most physicians believed that controlling hypertension and smoking cessation reduced the risk of CHD, the majority (66 percent) did not believe that lowering cholesterol had the same impact on risk. The median levels of serum cholesterol at which general and family practitioners reported instituting dietary and pharmacologic therapy were 280–299 mg d/l and 340–359 mg d/l respectively. These levels were far above recommended levels for the time, often exceeded the Lipid Research Clinic's 90th percentile levels for both males and females, and were much higher than levels recommended by the 1984 National Institutes of Health Cholesterol Lowering Consensus Conference.[7,8]

In the acute care setting, similar problems have been noted with identification and management of hyperlipidemia. A retrospective review of the records of patients with elevations of serum cholesterol in the range of 300 to over 1,000 mg d/l demonstrated that only 32 percent had any mention of this lipid level in the record at discharge.[9] It is noteworthy that this sample was composed of patients hospitalized primarily for cardiovascular disorders and for whom secondary causes for cholesterol elevations were eliminated. Further, follow-up at 2 to 16 months revealed that 79 percent of these patients had no further lipid studies performed and that diet was instituted in only 24 percent, with no drug therapy noted.

As a prelude to setting up our own Preventive Car-

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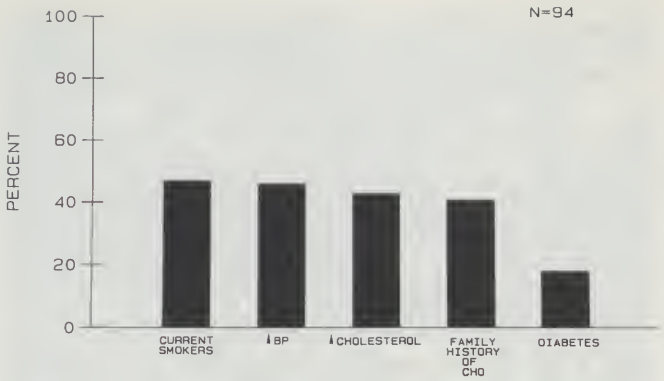


Figure 1. Percentage of patients reporting risk-factor presence.

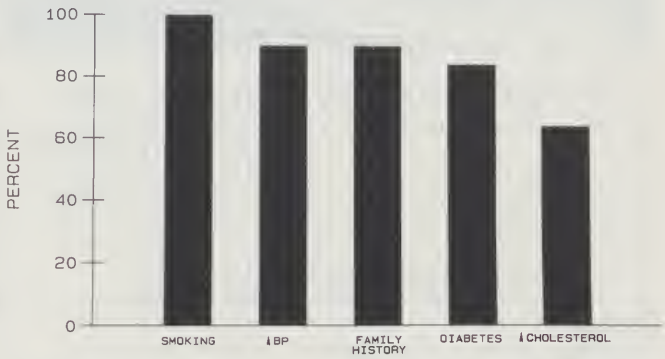


Figure 2. Percentage of records with physician mention of risk factor either present or absent.

diology Inpatient Consult Service, we designed an annual audit to examine risk identification and risk management practices among house staff and attendings caring for patients hospitalized with a diagnosis of CHD prior to 60 years of age. The record audit was supplemented with patient exit interviews to access information that might not have been documented in the medical record. In the fall of 1983 and again in the fall of 1984, during the early inception of the Preventive Cardiology Program, we collected data on 94 consecutive hospitalized inpatients with premature CHD. As the results are not different by year, they have been pooled for analysis. The majority of these patients were hospitalized for cardiac catheterization or bypass surgery. Only a small number (N = 9) were hospitalized for myocardial infarction. Interviews with patients revealed a high prevalence of known risk factors (Figure 1). Record audits revealed that physicians were attentive to hypertension, cigarette smoking, and family history as risk factors (Figure 2). However, hyperlipidemia was mentioned in the records of only 64 percent of these high-risk young people with CHD. Further, it appeared that lipids were not any more likely to be recognized in patients who reported in interviews that they had had an elevated cholesterol at some time in the past. Of 26 patients with routine screening cholesterol levels above 260 mg d/l, only 23 percent had a further lipid profile ordered. Triglycerides and HDL cholesterol were only measured in 18 percent of the total pool of people with early CHD. Lipid-lowering diets were ordered for only 9 patients, and only 12 patients had family members referred for screening. Again, these interventions were not correlated with either screening cholesterol levels or with a reported history of cholesterol elevation in the patients.

Thus, it appears that physicians are monitoring family history and blood pressure adequately and appear to attend to smoking as a major risk factor. Identifying and managing hyperlipidemia, however, appears to remain a problem. Recent surveys in Maryland may shed light on the problem. Preliminary results indicate that while physicians feel that risk reduction and "life-style" modification fall within their purview, they feel they lack the skills to influence behavior change effectively.[10] Further, the CPPT results were released less than two years ago and the NIH Cholesterol Consensus Conference has released recommendations only within the past year. Prior to this, physicians were confronted with a myriad of data on lipids without concise guidelines for screening and management. The National Institutes of Health National Cholesterol Education Program (NCEP), launched in November 1985, has a goal of reaching health professionals and the public with screening and management guidelines. It will be reviewed in "HBP Commentary."

It is now timely and appropriate for health practitioners to take advantage of the multitude of educational programs targeted specifically toward the problems of lipid management in both high-risk patients and the general population. Record audits and surveys of medical practice behavior suggest this is an area where there remains considerable room for improvement.

References

1. Wilhelmsson, C.; Elmfeldt, D.; Vedin, J.; Tibblin, G.; and Wilhelmsen, L. "Smoking and Myocardial Infarction." *Lancet* I 7904(1975):415–20.

2. Brensike, J.; Levy, R. *et al.* "Effects of Therapy with Cholestyramine on Progression of Atherosclerosis: Results of the NHLBI Type II Coronary Intervention Study." *Circulation* 69(1984):313–24.

3. LRC Program. "The Lipid Research Clinics Primary Prevention Trial Results." *JAMA* 251(1984):351–64.

4. Nora, J. "Genetic-epidemiologic Study of Early-onset Ischemic Heart Disease." *Circulation* 61(1980):503–508.

5. Rissanen, A. "Familial Occurrence of Coronary Disease: Effect of Age at Diagnosis." *Am J Cardiol* 44(1979):60–66.

6. Goor, R.; Shucker, B.; Cutler, J.; and Mattson, M. "Survey of Medical Practice Regarding CHD Risk." *Circulation* 70(1984):128.

7. Schaefer, E.J. and Levy, R.I. "Pathogenesis and Management of Lipoprotein Disorders." *N Engl J Med* 312(1985):1300–10.

8. National Institutes of Health Consensus Conference on Lowering Blood Cholesterol To Prevent Heart Disease. DHHS, December 1984.

9. Nash, D. "Severe Hypercholesterolemia Discovered During Hospitalization." *Circulation* 68(1983):158.

10. Levine, D. and Valente, C. "Role and Performance of Physicians in Patient Education." Proceedings from the National Council on Patient Information and Education, Washington, DC, October 1984.



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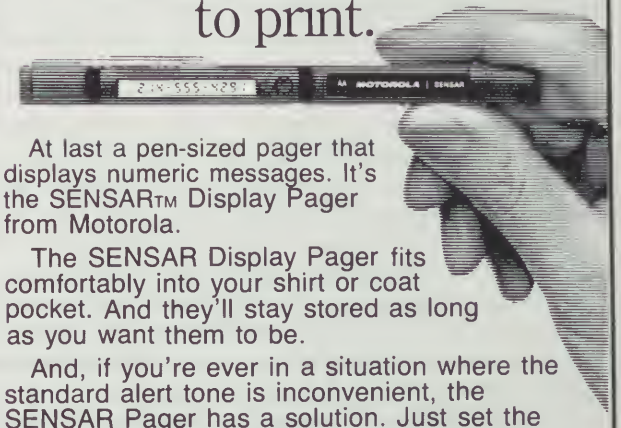
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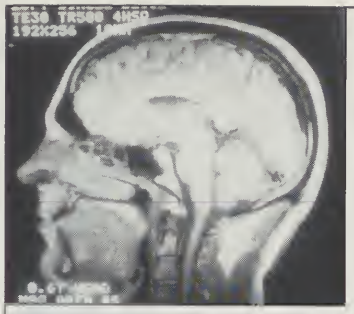
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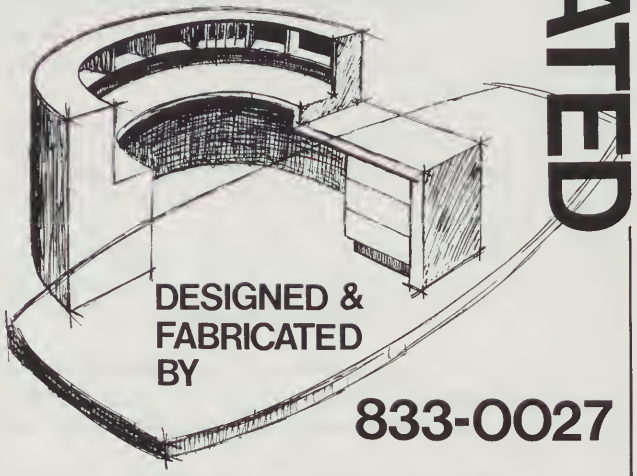
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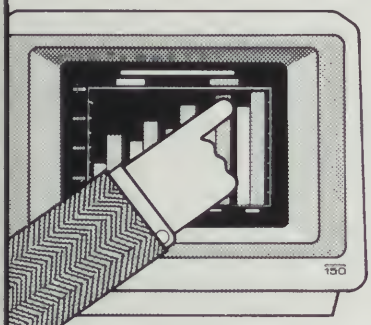


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CME Courses: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Mar 20–23 43rd Annual Clinical and Scientific Meeting on Psychosomatic Medicine. Hyatt Regency, Baltimore. Fee: $50 members, $100 nonmembers; 22 AMA Cat I credits.

Mar 21–22 Second Annual University of Maryland Contact Lens Symposium. Hyatt Regency, Baltimore. Fee: $160 for early registration; 12.5 AMA Cat I credits.

Apr 3–4 CO_2 Laser for Otolaryngologists and Allied Specialties. University of Maryland School of Medicine, Baltimore. Fee $675; 11.75 AMA Cat I credits.

Apr 11–12 Lung Cancer Update. Belvedere Hotel, Baltimore. Fee: TBA; 10 AMA Cat I credits.

Jun 6–7 Neurological Disorders: Current Therapy of Benign and Malignant Brain Tumors. Baltimore Convention Center. Fee and credits TBA.

Jun 22–27 12th Annual Family Medicine Review Course. Carousel Hotel, Ocean City. Fee: $350; credits TBA.

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Sep thru Jan—Visiting Professor Program— Lecturer/Topic directory available to hospitals and other health care organizations. An administrative fee is charged. Call for further information.

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Miscellaneous Meetings

Mar 20 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Baltimore. Info: 312-645-4958.

Mar 21 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Baltimore. Info: 312-645-4958.

Mar 24–26 Prevention of Venous Thrombosis and Pulmonary Embolism, an NIH Consensus Development Conference, Masur Auditorium, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info: M. Dillon, Prospect Assoc., 2115 E. Jefferson St., Suite 401, Rockville, MD 20852 (301-468-6555).

Apr 9 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Apr 10 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Apr 11 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Apr 17–19 Thirteenth Washington Hand Symposium, Mayflower Hotel, 1127 Connecticut Ave. NW, Washington, DC. Info: N.J. Cowen or M.K. Sorenson 202-332-0385.

Apr 25–26 Computer Applications, An Introductory Workshop, College Park, MD, sponsored by the American College of Obstetricians and Gynecologists. Fee: $360 nonfellow. Info: R. Murray 202-638-5577 ext. 343.

Apr 30 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Washington, DC. Info: 312-645-4958.

May 1 Managing the Business Side, conducted by AMA's Department of Practice Management, in Washington, DC. Info: 312-645-4958.

May 4–6 Fifth Region II & III Conference on High Blood Pressure Control: Consensus Amid Controversy. Radisson Wilmington Hotel, Wilmington, DE. Info: Coordinator, HBP Control Program, Delaware Division of Public Health, P.O. Box 637, Dover, DE 19903 (302-736-4651).

May 7 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

May 8 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Pittsburgh, PA., Info: 312-645-4958.

May 8–10 Alumni Crab Feast, University of Maryland School of Medicine, 7–10 p.m. Students Common, MSTF. Info: J. Thompson 301-528-7454.

May 9 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

May 10 Alumni Reception and Dinner Dance, at the Sheraton Inner Harbor, University of Maryland School of Medicine, Info: J. Thompson 301-528-7454.

May 15–18 Virginia Society of Otolaryngology—HNS Annual Meeting, Wintergreen Resort, Wintergreen, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

May 27–31 Fifteenth Annual SCCM Educational and Scientific Symposium, Washington, DC. Fee: Nonmember physicians $375, nurses and therapists $270, member physicians $275, nurses and therapists $225; approx 40 Cat I credits. Info: T. Schultz 714-870-5243.

May 29–Jun 1 The Virginia Society of Ophthalmology Annual Meeting, The Omni International, Norfolk, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

Jun 25 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jun 26 Managing the Business Side, conducted

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The Johns Hopkins Medical Institutions

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985–86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Mar 21 Computers in Ophthalmology. Hours of instruction to be announced.

Mar 22–23 Hemodynamic Monitoring/Patient Care and Pulmonary Artery Catheterization. Hours of instruction: 12.5.

Mar 24–26 Critical Care Medicine. Hours of instruction: 24.

Apr 3–4 Diagnosis and Treatment of Neoplastic Disorders: Medical, Surgical, and Radiotherapeutic Aspects. Fee: $250; 16 AMA Cat I credits. Info: D. Heydinger 301-955-6046.

Apr 7–12 Pediatric Trends 1986. Fee: $500; 45 AMA and 45 PREP credits. Info. Course Coordinator 301-955-5880.

Apr 14–15 *In Vitro* Toxicology—Approaches to Validation. Fee: $275; 15 AMA Cat I credits and 1.5 CEU pending. Info: J. Ryan 301-955-6046.

Apr 19 Third Annual Houston Everett Memorial Course in Gynecologic Urology. Fee: physicians $90; residents $75 (with letter verifying status); 8 AMA Cat I credits. Info: J. Ryan 301-955-6046.

Apr 28–30 Interventional Radiology and DSA. Fee: $325 physicians; $175 residents, nurses, technologists; 25 AMA Cat I credits; ECE by ASRT. Info: C. Kearney 301-955-3168.

May 2–3 The Developing Heart. Fee: $75. Info: C. Kearney 301-955-6046.

May 1–2 Advances in Head and Neck Surgery. Hours of instruction: 16.

May 6–9 Emergency Medicine. Hours of instruction: 29.

May 12–17 Topics in Clinical Medicine. Hours of instruction: 43.

May 16 Recent Advances in Macular Degeneration (Columbia, MD). Hours of instruction: 8.

May 19 The Use of Insulin Pump Treatment. Fee: $90; 6.5 AMA Cat I credits, 6.5 CEU. Info: C. Sentman 301-955-6046.

May 19–21 Toxicology Update '86. Hours of instruction: 24.

Jun 6–7 Glaucoma '86. Hours of instruction: 10.

Jun 9–13 Basic Practicum in Diagnostic Ultrasound. Hours of instruction: 40.

Jun 19–20 National Conference on Alcoholism and Cardiovascular Disease.

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86-12/8/86. Info: J. Mosmiller 301-955-8450.

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Advanced Obstetrics & Gynecology Apr 23–25, Nov 5–7. Fee: $325, 24 AMA Cat I credits.

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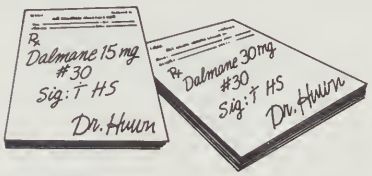
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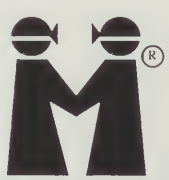
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On the cover: The University of Maryland School of Medicine. Photo by W. Brooks Short III.

The views in this publication are those of the authors and do not necessarily reflect the opinion of the Medical and Chirurgical Faculty of the State of Maryland.



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Insurance Monitor

St. Paul Declares Moratorium on Medical Malpractice

The St. Paul Insurance Company will not write new medical malpractice policies for "an indefinite period," according to James Boudreau, treasurer. The company will continue to renew existing policyholders who meet their underwriting standards, and staff additions to an exiting policy for a group practice or clinic will be considered. St. Paul, the largest private insurer of health-care providers, covers approximately 20 percent of all physicians in the country.

• • •

Virginia Defense Costs

According to an analysis of malpractice claims paid by the Virginia Insurance Reciprocal in the first quarter of 1985, the company's defense costs had increased 1,327 percent over 1981.

• • •

OB/GYN Costs

A survey of 1,400 OB/GYNS, sponsored by the American College of Obstetricians and Gynecologists, found that nine out of ten OB/GYNS received an increase in their medical malpractice premiums in 1985. For one in four OB/GYNS, the increase in premiums was $13,000 or more, with the highest average increases in New York, $21,635, and Florida, $17,131. The study also found that OB/GYNS spend an average of 10 percent of their gross income on insurance, with OB/GYNS in New York spending approximately 16 percent of gross income. Because of larger insurance premiums, 60 percent of OB/GYNS increased their fees by more than 10 percent in 1985, as compared with fewer than half of OB/GYNS in 1983. The survey also indicated that two-thirds of all OB/GYNS have increased the use of diagnostic tests and other defensive medicine techniques. In 1985, 23 percent of OB/GYNS decreased the level of high-risk obstetrics in their practices, compared to 18 percent in 1983.

• • •

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Chicago Suit

A settlement of $6.2 million was awarded to a three-year-old suburban Chicago boy and his parents after the child suffered permanent brain damage during a 20-minute hernia repair when he was nine weeks old. According to the child's attorney, the boy went into a coma in 1982 when someone in the operating room turned off the oxygen on the anesthesia machine. The error was not noticed until the child was without oxygen for 11 minutes and his heart stopped. The child remains in a coma and will be on a ventilating machine for the rest of his life. The settlement was approved just before the case was to go to trial.

• • •

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Executive Committee and Council Actions

Council—January 30, 1986

• **Adoption of Minutes** Minutes for Executive Committee meetings, a conference call, and a Council meeting from November 21, 1985 through January 9, 1986 (inclusive) were adopted.

• **Budget** The 1986 proposed budget was approved, and the 1985 expenditures were accepted by line items.

• **Building Assessment** Council considered a recommendation from the Executive Committee of January 9, 1986 for an assessment of $200 to be submitted to the House of Delegates in April. After discussion of the exact amount of the assessment, other sources of funding, and payment mechanisms, it was moved, seconded, and passed that Council recommend to the House of Delegates an assessment of $100 per member be made to cover the shortfall in funding for the new building.

• **Medicare Demonstration Project** Carl J. Sardegna and members of the staff of Blue Cross/Blue Shield made a presentation on the Medicare Demonstration Project proposal they have submitted to the Health Care Financing Administration.

• **Dues Waivers** Council granted dues waivers for four members at the request of Montgomery County society and in accordance with Article III, Section 8 of the Bylaws.

• **Emeritus Membership** Twenty members were approved for recommendation to the House of Delegates for Emeritus membership, each on the recommendation of their component society.

• **Occupational Health Committee** Guidelines for Impairment/Disability Evaluation reports were approved by Council per a request from Michael Spodak MD, chairman of this committee.

• **AMA Nomination** Receiving no nominations to various AMA committees, Leon Kassel MD, Chairman, requested any such nominations be submitted to the Faculty by July 1, 1986.

• **Malpractice Legislation** Donald T. Lewers MD reported on the meetings with various Delegates and Senators in Annapolis and informed Council about several legislative proposals.

• **Auxiliary** Mrs. Kathleen S. Karpers, President of the Auxiliary, reported on activities of Auxilians involved with the malpractice effort, with identifying physician families by legislative district, and with raising funds for the new building, among other projects.

• **Preventive Medicine and Public Health Committee & Subcommittee on Maternal Welfare** A draft letter to Governor Hughes regarding an increase in funding for family planning services was approved and will be sent to the Governor on behalf of the Council, signed by the Council Chairman.

• **New Auditors** Council approved the firm of Bennett, Labrador, O'Dea and Posey, PA, Certified Public Accountants, to conduct the next audit of the Faculty's financial records.

One Minute with Diabetes

Doctor, I have diabetes and I am afraid my children will get the disease. If they do, is it possible to predict whether they will develop complications? What are the chances, and can any preventive action be taken?

The chances that the children of a diabetic will become diabetic depends, somewhat, on the type of diabetes the parent has. If the parent is an insulin-dependent diabetic (TYPE I) the inheritance risk is very low. About 0.25 percent of children 15 years old or younger have diabetes mellitus, and the parents of many do not have diabetes. This suggests there is no inheritance factor.

The risk is much higher for the parent with noninsulin dependent (TYPE II). This type of diabetes will not show up in children until they are adults. About 5 percent of the adult population has NIDDM.

The incidence of diabetes is increasing in the United States, and it is estimated that 10 percent of the population will be diabetic by the year 2000. This is due to the increased interest in the diagnosis of the disease, increased longevity, and increasing percentage of overweight people in our population.

Because noninsulin dependent diabetes has been associated with obesity, parents can be more helpful in teaching their children, by example, to maintain good dietary habits and exercise programs. This may not prevent diabetes from developing in their forties, but it will certainly make it easier for them to control their disease if it occurs.

There is no way to predict whether an individual will develop complications nor to know how severe they will be if they show up. Complications are not inevitable, and may be delayed or prevented by maintaining good control of the blood glucose levels.

DeWITT E. DeLAWTER MD

Maryland Oncology Newsletter

Soft Tissue Sarcomas: Staging and Management

The staging of these tumors depends on G, T, N, and M. G expresses the grade of malignancy; G_1 signifies well-differentiated tumor (low grade malignancy), G_2 means moderately differentiated, and G_3 indicates poorly differentiated tumor with high malignant potential. This is the most significant prognostic factor and reflects on staging. T expresses size of the primary; T_1 is less than 5 cm in diameter, T_2 is 5 cm or more, and T_3 is any tumor size that involves bone or main vessel or nerve. N signifies the status of the regional lymph nodes (LN) whether they are not involved by metastasis (N_0) or have metastasis (N_1). M signifies absence of distant metastases (M_0) or presence (M_1). There are 4 stages:

Stage I	G_1	T_1 or $_2$	N_0	M_0
Stage II	G_2	T_1 or $_2$	N_0	M_0
Stage III	G_3	T_1 or $_2$	N_0	M_0
	or any G	any T	N_1	M_0
Stage IV	any G	T_3	N_0	or M_0 = IV M_0
	or any G	any T	N_0 or $_1$	M_0 = IV M_1

This staging is more meaningful than the WHO classification based on the cell type shown in the previous issue of *MMJ*. The survival data based on such staging reveal that patients with stage I have 80 percent, five and ten year survival rates. Stage II population has 60 percent five and ten year survival. Stage III has 30 percent five year survival and about 20 percent 10 year survival. Stage IV, M_0 has less than 10 percent five year survival rate.

Management of soft tissue sarcomas is primarily surgical. Enucleation of these tumors results in a 90 percent recurrence rate, local resection has 50 percent recurrence, and wider resection gives 10 percent local recurrence. The extent of surgical extirpation depends on the size and location of the tumor. Small superficial tumors can be resected with wide, safe margins any place in the body. Larger tumors located in the head and neck region are mainly rhabdomyosarcomas and often in children require standard resection with tumor-free margins. Adjuvant chemotherapy in the form of Actinomycin-D, Vincristine, and cyclophosphamide ± Actinomycin are of some benefit for regional and systemic control and mainly in children. However, these drugs seem not to affect fibrosarcomas or schwannomas, and surgery is the only method of management ± radiation therapy.

Trunkal tumors are treated by wide excision, and if they involve muscles, these are widely resected and replaced by synthetic mesh such as prolene or marlex. Retroperitoneal sarcomas are widely resected and may require the sacrifice of spleen, kidney, adrenals, part of the liver, pancreas, or bowel. Therefore, it is advisable to have a bowel prep performed preoperatively.

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

The majority of soft tissue sarcomas arise in the extremities, and limb-saving procedures must be considered. Deep-seated tumors in the muscle or fascia can be managed by compartmental resection of a group of muscles. This is usually followed by irradiation especially for G_2 and G_3 tumors. However, such an approach has its limitations, for example, if the tumor involves periosteum, bone, major vessels, or nerves, amputation is in order.

Recently, segments of bone have been resected with the tumor, and replaced by methacrylate and intramedullary nailing with good results. Immunotherapy and hyperthermia are being investigated. Hyperthermic limb perfusion with chemotherapy also is being tried.

Patients with sarcoma should be closely observed (after management of their primary) for local recurrence and lung metastasis. Although most of these tumors metastasize via the blood stream, synovial sarcoma and malignant fibrous histocytoma have the highest tendency among these tumors to metastasize to regional LN.

CT scanning should be obtained one or two months after the resection of retroperitoneal tumor as a baseline for future follow-up.

Tumor Conferences are held weekly on Fridays between 8 and 9 A.M. in Room N13E28 at the University of Maryland Hospital. Physicians are welcome to attend this open meeting to present cases, but please call 528-5224 before Friday to schedule your case(s); bring the pathological slides with you.

E. GEORGE ELIAS MD
University of Maryland, Surgical Oncology Program

Bibliography

Russell, W.O.; Cohen J.; Enzinger, F. *et al.* "A Clinical and Pathological Staging System for Soft Tissue Sarcomas." *Cancer* 40(1977):1562–70.

Soft Tissue Sarcoma, in Seminars in Oncology. J. W. Yarbo (ed.). Orlando, FL: Grune & Stratton Publishers. Vol. VIII, 129–237, 1981.

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APRIL 1986

1985 SEXUALLY-TRANSMITTED DISEASES (STD) TREATMENT GUIDELINES

(Continued from March Newsletter)

Follow-Up and Re-Treatment of Persons with Syphilis

All patients with early syphilis and congenital syphilis should be encouraged to return for repeat quantitative nontreponemal tests at least 3, 6, and 12 months after treatment. In these patients, quantitative nontreponemal test titers will decline to nonreactive or low-titer reactive within a year following successful treatment with penicillin. Serologic test results decline more slowly in patients treated for disease of longer duration. Patients with syphilis of more than 1 year's duration should also have a repeat serologic test 24 months after treatment. Careful follow-up serologic testing is particularly important in patients treated with antibiotics other than penicillin. Examination of CSF should be planned as part of the last follow-up visit after treatment with alternative antibiotics.

All patients with neurosyphilis must be carefully followed with periodic serologic testing, clinical evaluation at 6-month intervals, and repeat CSF examinations for at least 3 years.

The possibility of reinfection should always be considered when re-treating patients with early syphilis. A CSF examination should be performed before re-treatment unless reinfection and a diagnosis of early syphilis can be established.

Re-treatment should be considered when:

1. Clinical signs or symptoms of syphilis persist or recur:
2. There is a fourfold increase in the titer of a nontreponemal test; or
3. An initially high-titer nontreponemal test fails to decrease fourfold within a year.

Patients should be re-treated with the schedules recommended for syphilis of more than 1 year's duration. In general, only one re-treatment course is indicated because patients may maintain stable, low titers in nontreponemal tests or may have irreversible anatomical damage.

Management of Sex Partners

Patients who have been exposed to infectious syphilis within the preceding 3 months and other patients who, on epidemiologic

grounds, are at high risk for early syphilis should be treated as for early syphilis. Every effort should be made to establish a diagnosis in these cases.

Adapted from the Centers for Disease Control (CDC), Morbidity and Mortality Weekly Report (MMWR), Supplement, October 18, 1985/Vol. 34/No. 4S.

Update: Haemophilus influenzae b Polysaccharide Vaccine

Since the licensure of the first polysaccharide vaccine against Haemophilus influenzae b (Hib) in April 1985, over 3 million U.S. children have been immunized against this bacterial disease. The vaccine is recommended for all children at the age of 24 months, and as early as 18 months of age for children at highest risk of Hib disease (1). Currently, three manufacturers are licensed to produce the vaccine (Praxis: b-Capsa-1@; Lederle: Hib-immune@; and Connaught Hibvax@).

As part of the continuing evaluation of the vaccine, CDC, the U.S. Food and Drug Administration (FDA), and the vaccine manufacturers are collaborating in gathering information on children who have developed invasive Hib disease after vaccination. As with any vaccine, a certain number of cases of disease may be expected to occur among vaccinated persons.

To ensure a more complete ascertainment of cases, practitioners and health departments are requested to report all cases of Hib disease (e.g., meningitis, bacteremia, epiglottitis) occurring after vaccination. Cases from 1985, as well as current cases, are solicited, complete case ascertainment for this entire time is important for the most accurate interpretation of these reports. Reports can be made directly to the manufacturers*; by sending Form 1639 "Adverse Reaction Report," to FDA (the form is available by calling FDA at 301-443-4580); or by writing or telephoning the Meningitis and Special Pathogens Branch, Division of Bacterial Disease, Center for Infectious Diseases, CDC, Atlanta, Georgia 30333; telephone (404) 329-3687.

In addition to this request for information on Hib cases, it is important to report any serious adverse events that occur within 28 days of receipt of vaccine. Such events occurring among recipients of Hib vaccine purchased with public funds should be reported to the appropriate city or state health department, which will complete an investigation and send a report to CDC. Adverse events occurring among recipients of privately purchased Hib vaccine should be reported directly to the manufacturers or to FDA (Form 1639).

*Manufacturers' addresses and telephone numbers are as follows: Mead-Johnson Nutritional Division, Evansville, Indiana 47721 (distributors of the Praxis vaccine); telephone (812) 429-7480. Lederle Laboratories, Pearl River, New York 10965; telephone (914) 735-5000. Connaught Laboratories, Inc., Swiftwater, Pennsylvania 18370; telephone (717) 839-7187.

Reference

1. ACIP Polysaccharide vaccine for prevention of Haemophilus influenza type b disease. MMWR 1985;34:201-5.

Adapted from the Centers for Disease Control (CDC), Morbidity and Mortality Weekly Report (MMWR), March 7, 1986/Vol. 35/No. 9.

AGRANULOCYTOSIS ASSOCIATED WITH THE USE OF AMODIAQUINE FOR MALARIA PROPHYLAXIS

Seven cases of agranulocytosis associated with the use of amodiaquine (Camoquine) among British travelers have recently been reported. Sixteen additional cases of agranulocytosis from Western Europe associated with the use of amodiaquine have recently been reported to the drug manufacturer, and two U.S. cases have been reported to Centers for Disease Control (CDC). Twenty-three (23) of these 25 cases occurred in 1985 or 1986, and seven are reported to have been fatal.

The reason for the discrepancy between the previous and recent experiences with amodiaquine is not clear. While previously used largely for treating malaria in endemic areas, amodiaquine has been increasingly recommended for chemoprophylaxis in nonimmune visitors to endemic areas. It is not known whether bone-marrow toxicity is more likely to occur when the drug is used on a routine weekly basis for prophylaxis or when used in combination with other antimalarials, such as Fansidar or Paludrine. Agranulocytosis has been associated with the use of Fansidar alone, but has not been reported when Paludrine has been used alone.

Alternatively, the recent increase in the number of agranulocytosis cases might be explained by an increase in the number of persons using amodiaquine for malaria prophylaxis. Although amodiaquine is not marketed in the United States, information provided by the manufacturer indicates that the number of Europeans using amodiaquine for malaria prophylaxis may have increased in 1985. In the United Kingdom, amodiaquine became available in March 1985 after a 10-year hiatus in marketing; in Switzerland, a threefold increase in amodiaquine sales was noted from 1984 to 1985.

In April 1985, CDC revised its recommendations for preventing malaria in travelers, because of severe cutaneous reactions associated with the use of Fansidar, and recommended amodiaquine use for malaria prophylaxis could be considered as an alternative for longer-term travelers at risk of acquiring chloroquine-resistant Plasmodium falciparum (CRPF). This recommendation was based on studies showing amodiaquine was somewhat more effective than chloroquine in treating CRPF infections and, therefore, might provide more protection than chloroquine when used as weekly prophylaxis in areas where CRPF transmission occurs. Similarly, the World Health Organization recently suggested the use of amodiaquine as an alternative to chloroquine and recommended that it be used in combination with Paludrine or Maloprim (dapsone-pyrimethamine) for travel to certain areas.

It is now apparent that any possible prophylactic advantage that amodiaquine may afford is not justified by the possible risk of agranulocytosis associated with the use of the drug. CDC, therefore, no longer recommends that amodiaquine be used for prophylaxis. Otherwise, previous recommendations for the prevention of malaria in travelers remain valid.

References available from CDC.

Adapted from the Centers for Disease Control (CDC), Morbidity and Mortality Weekly Report (MMWR), March 14, 1986, Vol. 35, No. 10.

Arthropod-borne Diseases of Maryland

The Spring season brings with it the insect and tick pests and vector-borne diseases which are seen throughout some or all of the warm season. In Maryland, none of these diseases are common but any may result in death if not properly treated. With appropriate antibiotics, recovery is usually prompt and adverse sequelae prevented. Laboratory tests usually serve to confirm an earlier clinical diagnosis.

Rocky Mountain spotted fever (RMSF or tick-borne typhus fever) is caused by a rickettsia transmitted by infected ticks which are allowed to feed (bite and engorge) for four or more hours. Although the number of the infected ticks is small, human cases are sometimes concentrated in certain locales which may vary from year to year. The vector tick is the American dog tick and is common throughout Maryland.

A sudden onset with moderate to high fever with malaise, deep muscle pain, severe headache, chills and conjunctival injection, occurring three to fourteen (14) days following a tick bite may be RMSF. A maculopapular rash which moves centripetally usually occurs four to six days later, but may not always be present.

Tetracycline and chloramphenicol are specific treatments and early and convalescent sera usually confirm the diagnosis. "Preventive" treatment following a tick bite is not indicated.

Lyme disease is a spirochetal disease transmitted by a different tick Ixodes dammini. A distinctive skin lesion erythema chronicum migrans (ECM) usually precedes systemic symptoms of polyarthritis and neurological and cardiac involvements of varying combinations. ECM appears as a red macule or papule which expands in an annular manner. It is sometimes multiple and is often accompanied by malaise, fatigue, fever, headache, stiff neck, myalgia and other symptoms which last for weeks. The systemic sequelae may begin to appear weeks to months later.

The incubation period is three to thirty-two (32) days. July is the peak month but a few cases are seen earlier and many later into the fall. Early treatment with tetracycline or penicillin appears to prevent or lessen the severity of the major systemic stage.

Tularemia in Maryland is usually the result of contact with infected rabbits or wildlife during hunting season although some cases appear to have been tick-borne.

The agent of this zoonotic disease is a bacterium and results in a variety of clinical presentations related to the route of introduction. An indolent ulcer with regional lymphadenopathy is common but pneumonic, "typhoidal" and oculo-glandular types are reported in Maryland.

The incubation of two to ten days (usually three days) is related to the size of the inoculum and strain's virulence. Freezing of infective tissue does not destroy the organism.

Streptomycin is the drug of choice and the tetracyclines and chloramphenicol are effective if continued long enough but relapse do occur.

(This article will continue in the May issue)

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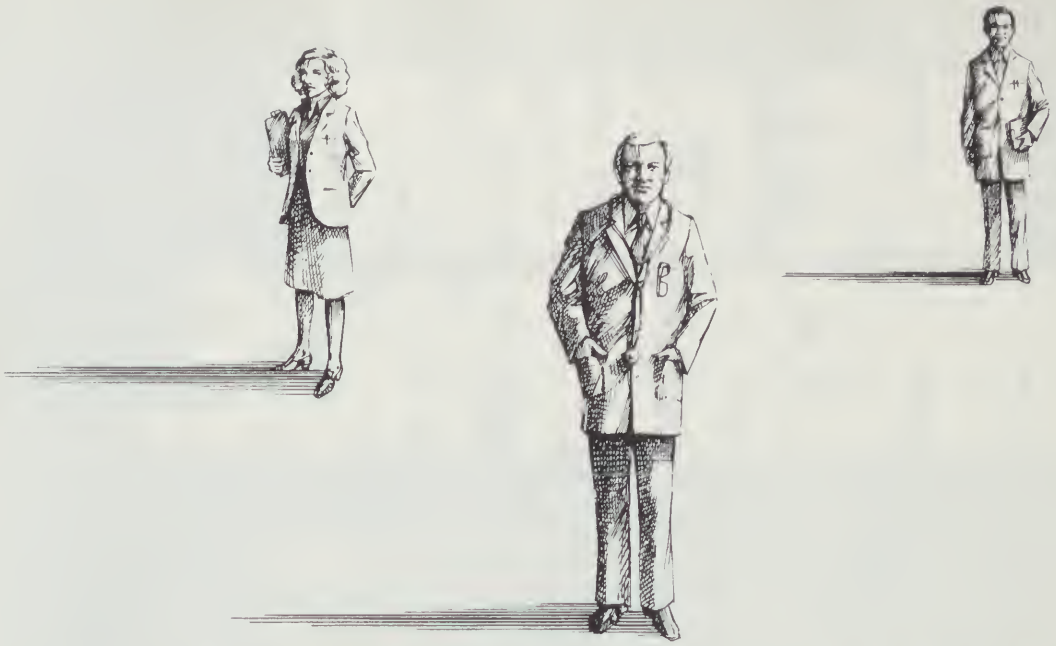
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Executive Director's Newsletter

April 1986

UTILIZATION RATIOS

Raw data on Area/State Utilization Ratios for Selected Surgical Procedures and Medical Diagnoses have been released to the public. The information was collected as a result of the 1985 health care cost containment legislation. Statewide statistics are broken into 9 specific areas covering approximately 30 medical procedures in 8 specialty areas.

There will be significant physician participation in the analysis of these data. If you would like to participate in this project, contact Michael Murray at the Faculty office (539-0872) or toll free in Maryland 1-800-492-1056.

MEDICARE/ MEDICAID

The House of Representatives on March 20 sent to the President HR 3128, the FY 86 Budget reconciliation bill. Contained in the bill are numerous provisions relating to Medicare and Medicaid.

Physician Reimbursement - i) The freeze on Medicare reimbursement and charges for nonparticipating physicians will be continued through December 31, 1986. ii) The freeze in the customary and prevailing charge level for participating physicians will END on May 1, 1986. The prevailing charge increase would be set at the increase in the Medicare Economic Index update determined on October 1, 1985 (3.15%) plus 1%. Participating physicians will, therefore, have a 4.15% update advantage over nonparticipating physicians. iii) A physician who participated in the first year of the program and who is not participating in the second would be allowed a customary charge level increase that would reflect actual charges between April 1, 1984 and March 31, 1985. iv) Future updates for physician reimbursement will be made on January 1 instead of October 1. v) A new election period to make participation decisions for calendar year 1986 will be available during April 1986. Participating physicians who do not cancel their agreements will be deemed to have automatically extended them through December 31, 1986. Future election periods will be made between November 15 and December 31.

UPCOMING SEMINARS

Med-Chi is pleased to announce that it will be holding two of the popular Diane Palmer seminars on Tuesday, May 20 and Wednesday, May 21. Please watch your mail for the brochure and registration form. A new seminar for physicians and office managers, "Practice Issues in the 1980s and Beyond" will be offered on Wednesday, May 21. A separate brochure will be mailed.

VERIFICATION OF DEATH

Legislation in Annapolis this year has highlighted a potential liability problem faced by funeral directors who take charge of bodies that have not been seen by medical personnel. Physicians should be aware of the following ethical opinion of the Faculty adopted in 1971:

> Unless exceptional circumstances warrant otherwise, a body should be identified, viewed, and death verified before or at the time of pronouncement of death.

FLORIDA LICENSING FEES

A Florida district court judge has ruled unconstitutional a $1,000 medical licensing fee for nonresident Florida physicians. As a result, nonresident physicians will now pay $100 for a Florida medical license just as state residents do. Chief Judge William Stafford specified in his ruling: the Florida Department of Professional Regulation (DPR) within 30 days must notify all nonresident physicians who had a Florida license in 1985 about the decision; any physician who let his license lapse may renew it for the $100 fee plus a $50 reactivation charge; and the DPR within 30 days must return $900 to all physicians who paid the $1,000 fee, with the remainder to be applied to their new license.

PLI WITNESSES SOUGHT

James Sammons, AMA Executive Vice President, has issued an appeal for physicians to send examples of disruptions in health care resulting from the professional liability crisis in this order:

- Describe specific instances in which patients' care was disrupted. Whenever possible, please include names and phone numbers of patients willing to discuss their situation. Take steps to protect patient confidentiality or get permission from patients to use their names. WE WILL ASSUME YOUR LETTER CAN BE MADE PUBLIC.
- Prorate premium increases over patient services to show how much each service charge would have to be raised to cover the premium increase.
- Specify change in practice patterns with an emphasis on how these changes affect patients.
- Document changes in treatment decisions or locations.

Send letter to: James H. Sammons, MD, Liability Crisis Project, 535 N. Dearborn, Chicago, IL 60601.

Acting Executive Director

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HBP Commentary

Role of Blood Cholesterol in Atherosclerosis and Coronary Heart Disease

ROGER SHERWIN MB, B Chir; CAROL LEWIS ScD; and R. PATTERSON RUSSELL MD

The Framingham study and other similar studies in the United States have indicated that high blood cholesterol, hypertension, and cigarette smoking contribute roughly equal risks of coronary heart disease (CHD). However, data from international studies indicate that some degree of hypercholesterolemia is a necessary condition for epidemic levels of CHD in a population. Recently, the best-designed cholesterol intervention study to date confirms the benefit of aggressive intervention on high blood cholesterol.

Sherwin is a professor with the Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine, Baltimore; Lewis is Executive Director of the Maryland High Blood Pressure Commission; and Russell is an associate professor at Johns Hopkins Medical School, Baltimore.

Coronary heart disease (CHD) occurring as a result of atherosclerosis must now be considered epidemic in the United States, accounting for about half the deaths in middle-aged men. Although there are clearly a number of genetic influences on CHD, there must also be a substantial environmental component; it is difficult to imagine that immigrants are sufficiently unrepresentative of the genetic makeup of their parent stock to account for the vastly higher rates of CHD experienced by several ethnic groups in the United States than in their various Asian and European countries of origin.[1]

Studies examining the environmental component can be divided into two broad categories: those involving observation only and those involving intervention (experiments). While most studies of CHD are of the first type, it is in general only from studies of the second type that firm inferences concerning cause can be made, and then only when subjects are randomized, as in the recent Lipid Research Center Coronary Primary Prevention Trial (CPPT).[2]

The observational studies of greatest interest are the longitudinal ones in which the dietary characteristics of individuals are related to their subsequent incidence of CHD. These also fall into two groups: those conducted within the United States and those conducted internationally. The best known of the U.S. studies took place in Framingham, Massachusetts, but several others have been carried out in various parts of the United States with generally consistent results. The data from these studies have been combined recently in the national cooperative Pooling Project.[3]

Risk Factors

Five risk factors in individuals who subsequently develop CHD emerge clearly from the U.S. studies: age, sex, hypertension, blood cholesterol, and smoking. The first two, although strongly associated with risk, are discussed less than the others, because they cannot be modified and do not therefore offer potential approaches to prevention. Men have a much greater risk than women in early middle age, but the risk increases with age more steeply in women than in men, so that the rates converge. A useful bench mark to remember is that each year about one of every 100 American men between 45 and 64 years old experiences a first major coronary event: death or myocardial infarction.[3]

Data relating to the three major modifiable risk factors are shown in Figure 1, next page. Diastolic blood pressure is a strong predictor of CHD (1a). As the diastolic pressure rises, so does the degree of risk, becoming about four times greater when diastolic pressure is over 105 mm Hg than when it is 75 mm Hg. Although diastolic hypertension has received greater emphasis in the past, it is now known that systolic hypertension is at least as important as a risk factor. With respect to smoking, the risk also increases with the number of cigarettes smoked each day (1b); there is no safe level of cigarette smoking. The third modifiable risk factor is blood cholesterol. Once again, the combined data show a continuous increase in the risk of CHD as the level of blood cholesterol rises (1c).

The pooled data also show the influence of *combined* risk factors on the incidence of CHD (1d). This involves arbitrary distinctions to define risk factors, in this case designating as "abnormal" a blood cholesterol concentration of 250 mg/100 ml or more and a diastolic blood pressure of 90 mm Hg or higher. This figure shows the synergistic effect on multiple risk factors. The incidence of CHD ranges from two "first events" per 1,000 men per year in the *absence* of the three risk factors to about 18 "first events" in the *presence of all three*—a ninefold increase.

The pooled data give the impression that hypertension, smoking, and high blood cholesterol are of approximately equal importance in the development of CHD. Such a conclusion probably is erroneous; high blood cholesterol appears to have a much more fundamental relationship to atherosclerosis and heart disease than the other factors. But this relationship only emerges from the international data.

HBP Commentary is contributed by the Maryland High Blood Pressure Commission, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

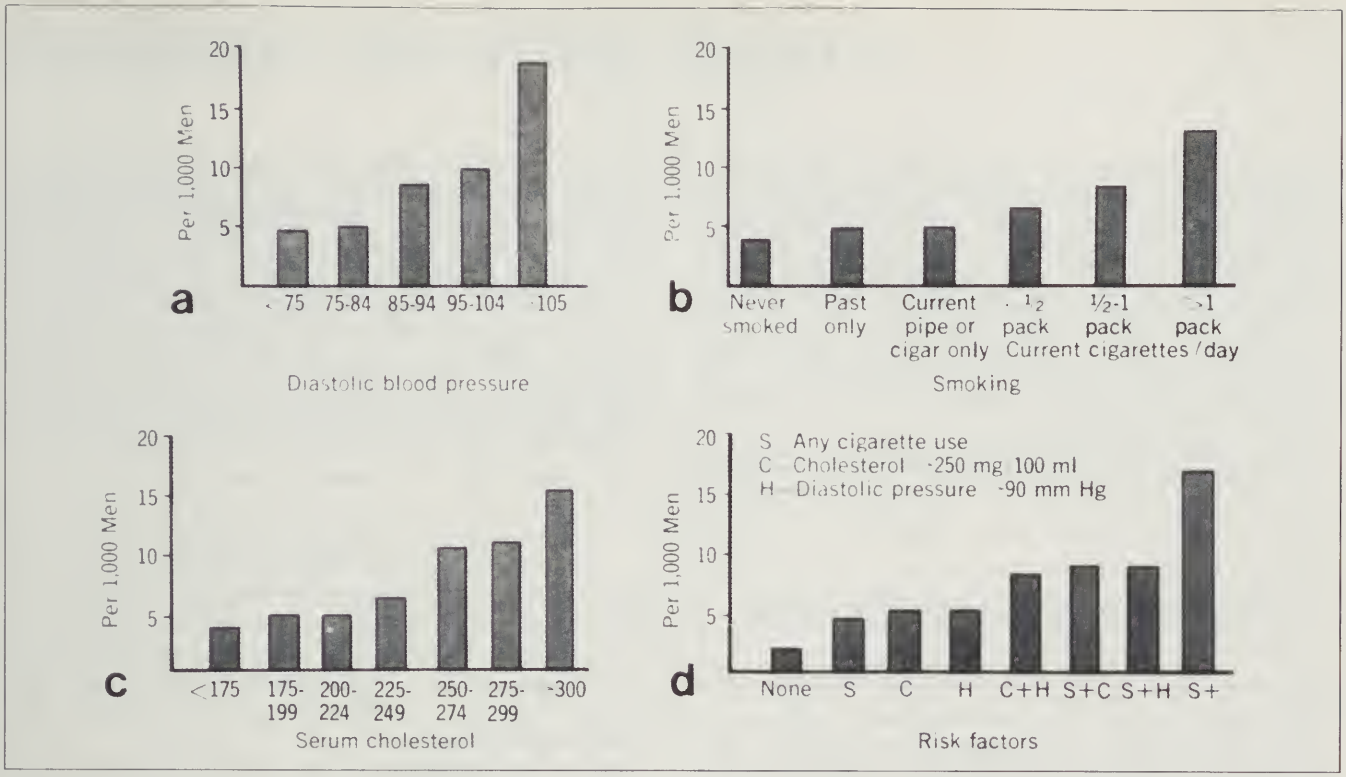


Figure 1. Risk factors in coronary heart disease. Men aged 35 to 64 having first major coronary event in one year. (a) Diastolic blood pressure. (b) Smoking. (c) Serum cholesterol. (d) Combined risk factors. Numbers denote deaths/1,000/year.[3]

Data from Seven Countries

Keys conducted similar longitudinal studies among defined groups of middle-aged males living in seven countries representing a wide range of genetic and cultural variation.[4] Because the data were collected by a single team of investigators using standardized criteria, valid comparisons among countries can be made. Figure 2 shows the overall death rates in these groups including one from the United States. The rate for American men (railroad employees in Minnesota) compares favorably with most of the others. However, the CHD death rates show much greater differences among the countries. Only in Finland is the death rate from CHD as great as the death rate in the United States.

How do the risk factors found in the United States relate to the rate of CHD in these other countries? There is a clear relationship between the mean blood cholesterol level in each of the population groups and the CHD death rate and incidence for that group. However, the relationship between mean blood pressure and the CHD rate is considerably weaker and that with average cigarettes per capita is very weak indeed. Despite the weak relationship of smoking to CHD *among* countries, *within* each population cigarette smokers had a higher risk of CHD than nonsmokers, even when the overall rates of CHD were very low.

Just as there is a close relationship between blood cholesterol levels and CHD rates for each population group, there is an equally close relationship between mean blood cholesterol level and the mean dietary intake of saturated (animal) fat in that population group. There is no known population with an epidemic rate of CHD that does not also have an elevated mean blood cholesterol level, and there is no population with

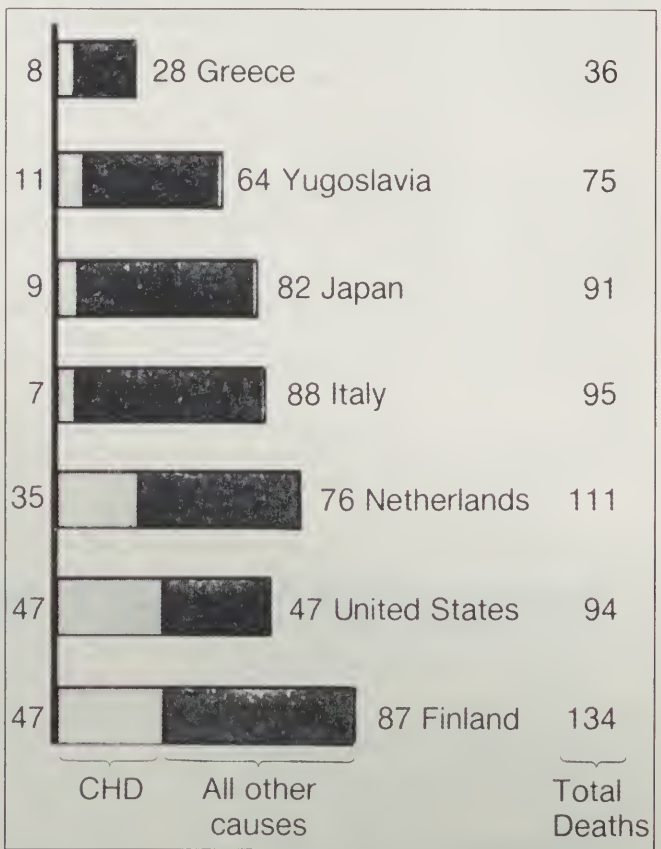


Figure 2. Death rates of men aged 40 to 59 in seven countries, five-year follow-up. Numbers denote deaths/10,000/year (adapted from ref. 4).

a high mean blood cholesterol level that does not also have a high intake of saturated fat. What is a high level of blood cholesterol? In Japan, for example, where the CHD rate is low, the average cholesterol level for middle-aged men is about 160 mg/100 ml. It is in terms such as these that high levels of blood cholesterol should be judged, rather than in terms of mean levels for men in the United States, who experience one of the highest death rates from CHD.

The international data suggest that some degree of hypercholesterolemia is a *necessary condition* for CHD to occur at epidemic levels in a population, and that a high level of saturated fat in the diet is a necessary condition for hypercholesterolemia in such a population. While there are clearly specific genetic causes for several different types of dyslipoproteinemia (including low HDL cholesterol) and coronary deaths resulting therefrom, it seems that there is a major environmental component of which diet is a fundamental part.

Why then did blood cholesterol not emerge as a more potent risk factor than hypertension or cigarette smoking in the US studies? It is because Americans are virtually all hypercholesterolemic, at least by Japanese standards. It is perhaps helpful to consider the consequences if everyone in the Framingham population were to have been a cigarette smoker. The full extent of the risk of cigarette smoking could not have been demonstrated, because there would have been no "normal" population with which to compare the smokers.

Clinical Evidence

How well has the circumstantial evidence implicating cholesterol, provided by Framingham and other studies, stood up to the definitive test provided by the recently completed clinical trial of cholesterol reduction? Only one clinical trial of sufficient sample size and derivation has addressed the effect of substantial reduction of blood cholesterol in middle-aged men free of CHD at entry.

The recent large collaborative clinical trial of the bile acid-sequestering resin cholestyramine, the Coronary Primary Prevention Trial (CPPT), provides the most rigorous test yet of the "lipid hypothesis."[2] More than 3,800 asymptomatic middle-age American men with elevated blood cholesterol levels were randomly assigned either to cholestyramine treatment or to a placebo of comparable taste and consistency. A cholesterol-lowering diet was recommended to men in both groups and its effect, therefore, was not tested by the trial. Those receiving cholestyramine had average total cholesterol levels of 8.5 percent lower, and average LDL cholesterol levels 12.6 percent lower, than the corresponding levels in those receiving placebo. Follow-up was continued for an average of 7.5 years. At the end of that period there was significant reduction in the combined incidence of fatal and nonfatal CHD in the group receiving cholestyramine. Once again, however, no significant difference in mortality from all causes was demonstrated, in part because of an unexpectedly high mortality from accidental and violent death in the experimental group.

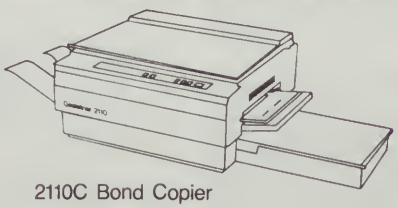
The evidence is now as strong for aggressive intervention on high blood cholesterol as it was 12 years ago for intervention on high blood pressure. For this reason a National Cholesterol Education Program (NCEP) is being developed on the same model as the successful National High Blood Pressure Education Program.[5] This program will be presented in next month's "Commentary."

References

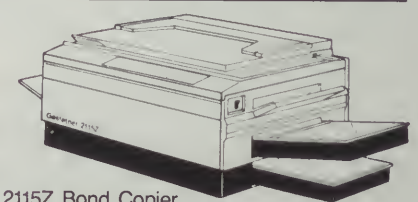
1. Sherwin, R. "The Epidemiology of Atherosclerosis and Coronary Heart Disease." *Postgrad Med* 56(1974):81–88.
2. Lipid Research Clinics Program. "The Lipid Research Clinics Coronary Primary Prevention Trial Results I. Reduction in Incidence of Coronary Heart Disease." *JAMA* 251(1984):351–64.
3. Pooling Project Research Group. *Relationship of Blood Pressure, Serum Cholesterol, Smoking Habit, Relative Weight and ECG Abnormalities to Incidence of Major Coronary Events: Final Report of the Pooling Project.* Dallas: American Heart Association, 1978.
4. Keys, A. (Editor). "Coronary Heart Disease in Seven Countries." *Circulation* 41 (supl 1)(1970):1–211.
5. National Institutes of Health Consensus Development Conference Statement on Lowering Blood Cholesterol to Prevent Heart Disease. DHHS, December 1984.

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Pediatric Morning Report

Each morning, for as far back as most of us can remember, groups of house staff assemble with some member of their faculty to review patients admitted to their service in the preceding twenty-four hours. This activity usually is termed "the morning report" or "intake rounds." The Morning Report is meant to be business as well as an occasion for learning. This column will attempt to summarize some of the interesting questions and their answers that were raised last month concerning patients discussed at our Morning Report.

• • •

A Child's Bladder Capacity

A four-year-old male was admitted with a history of not having voided for a period of approximately 16 hours. His bladder was easily palpable several centimeters above the symphysis pubis. Upon catheterization a total of 190 ml of urine was obtained. The resident wanted to know whether this represented an unusual volume of urine for the bladder of a four-year-old.

Robert Berger and associates devised a formula for predicting bladder capacity from chronological age (*J Urol* 129:347, 1983). Bladder capacity was determined at cystoscopy or nuclear cystography. *The bladder capacity in ounces equals age in years plus 2.* Mean bladder capacity appears to plateau by age 9 years. Children with infrequent voiding have larger bladder capacities than predicted, whereas those with frequency or enuresis have smaller than predicted capacities. Bladder capacity correlates linearly with age from birth to 11 years. A knowledge of bladder capacity can help eliminate the need for complex urodynamic tests. For example, in our patient of 4 years, we would have predicted a bladder capacity of 6 ounces (age in years plus 2). His measured urine volume of 190 ml is just about as predicted. By the way, his urinary retention was found to be the result of a meatal ulcer that produced pain on voiding.

• • •

SIDS Repetition in Families

A four-month-old infant was admitted for treatment of pneumonia. History revealed that a previous sibling had died of Sudden Infant Death Syndrome (SIDS). The parents, as well as the resident, wished to know what the risk of recurrence of SIDS in another family member happened to be.

A study from Norway provides a partial answer to this troublesome question (Irgens, L.M. *et al. J Pediatr* 104:349, 1984). A study based on 826,162 infants surviving the first week of life in the Medical Birth Registry of Norway revealed that the incidence of SIDS was 1.3 per 1000 infants. The recurrence risk for the nextborn sibling was 5.6 per 1000, and for all subsequent siblings 4.8 per 1000. From a counseling point of view, this is an encouragingly low risk. A study from Seattle found that the risk for recurrence in the next born sibling was 1.9 percent and for any subsequent offspring it was 2.1 percent (Peterson, D.R. *et al. J Pediatr* 97:265, 1980). In summary, the risk for a sibling is about 4 to 10 times that of the population in general but still is quite low.

• • •

Weight and Sex of Children Hospitalized with Croup

A resident remarked during Morning Report, after having admitted his seventh patient with croup in less than a week, that he was having trouble telling them apart because they all looked the same. They were all chubby males. Everyone smirked, but a quick literature search revealed that the impression has factual support. Robert Berg (*Pediatrics* 31:18, 1963) analyzed weight and sex of 850 patients admitted to the Beth Israel Hospital in Boston. Males composed 71 percent of the total. The median weight was the 63 percentile for the infants with croup, and 35 percent of the males and 20 percent of the females were at or above the 90th percentile. This study confirms that children hospitalized with croup tend to be heavy and are more likely than not to be boys. Why? Nobody knows, but be on guard that your patient may not have simple croup if the infant is puny, particularly if the patient is a puny female.

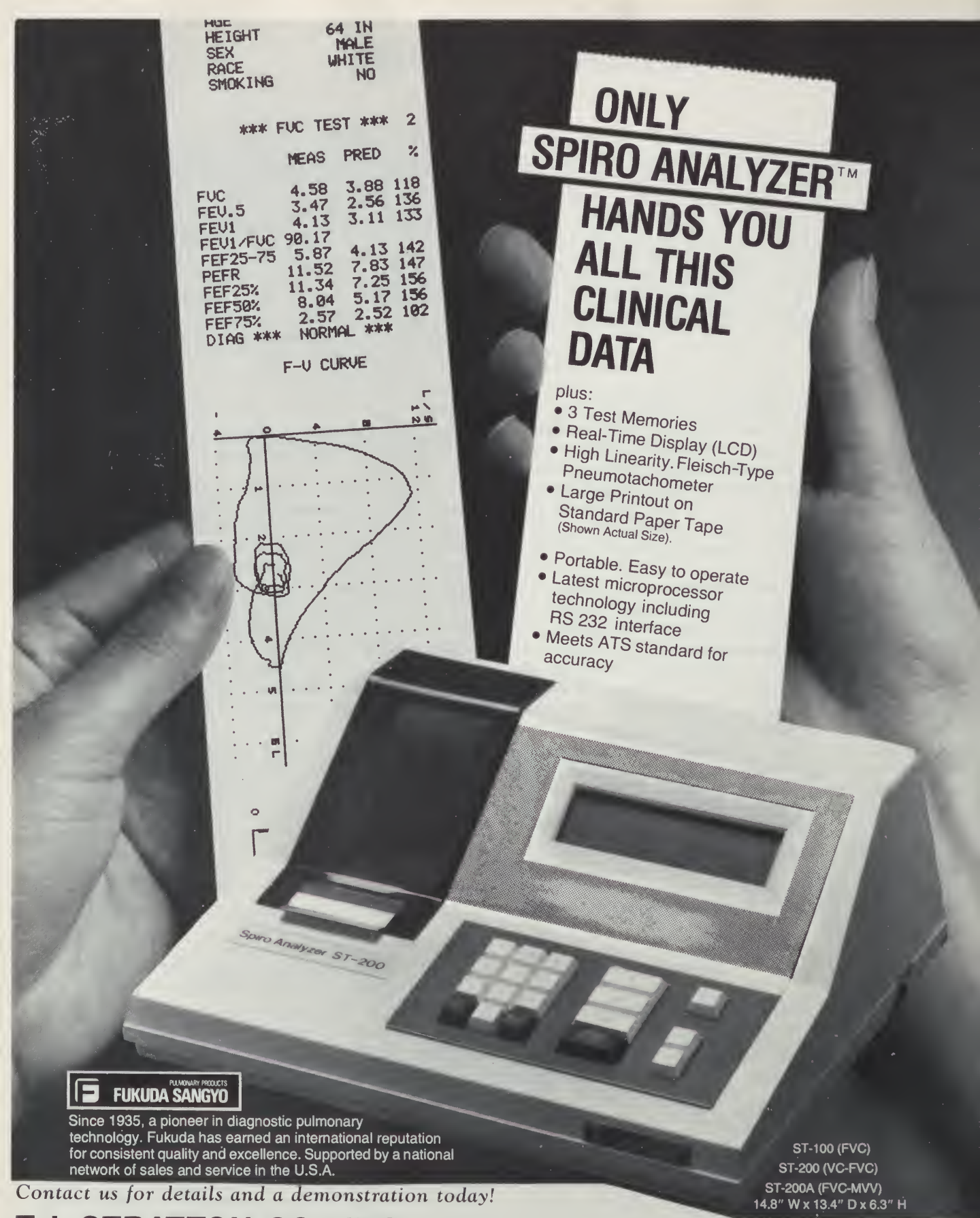
From the Department of Pediatrics, Frank A. Oski MD, Chairman; Robert Wood MD, Chief Resident in Pediatrics, Children's Medical and Surgical Center; and Linda Clark, Librarian, Department of Pediatrics, The Johns Hopkins School of Medicine.

PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of the State of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to the Physician Placement Service, 1211 Cathedral St., Baltimore, MD 21201; telephone 1-301-539-0872.

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Today's Psychiatry

Tardive Dyskinesia in the General Practice of Medicine

HARVEY LEWIS MD, NORMAN BACHER MD, and PETER FIELD PhD

General practitioners follow many chronic psychiatric patients maintained on neuroleptics. Tardive dyskinesia is a frequent and persistent complication affecting between 10 and 50 percent of all patients on currently used neuroleptics for over six months.

The movements of tardive dyskinesia affect chiefly the oral, lingual, and facial musculature. The tongue shows slow wormlike, irregular movements, is protruded and withdrawn rapidly, moves around in the oral cavity; the lips also move. These choreoathetoid movements may be seen in the hands and feet as well; less often in pelvic thrusting of the trunk musculature and in respiratory grunts when the diaphragmatic musculature is involved. It is possible that all striated muscle is involved to some degree. When the illness is far advanced the muscles of swallowing and breathing are affected. This pathophysiology represents by far the chief cause of death in tardive dyskinesia from tamponade of the trachea or pneumonia as a result of food aspirated into the trachea-bronchial tree.[1-3]

Tardive dyskinesia is presumed caused by blockade of supersensitive dopamine receptors in the striatum. When neuroleptics are used where no other treatment would prevail in major psychotic disorders, both patient and family are best served with a warning as to anticipated side effects. It should be remembered these movements often plateau, rarely are life threatening, and only sometimes are disfiguring (more so in the young). On the other hand, they often affect the aged who have been on neuroleptic drugs for many years, and often it is the aged who are severely affected by tardive dyskinesia. General factors tending to intensify the tremors include central nervous system organic conditions, depressed mood, increased anxiety, and even withdrawal of the offending agent. A spontaneously occurring form of tardive dyskinesia possibly associated with poor mouth and dental hygiene has been described for many years.

Treatments consist of the following measures: where possible, the neuroleptic should be reduced or discontinued; the decision to take such a step rests on the judgment of the treating physician in consultation with the patient and family. A second opinion from a psychiatrist who specializes in psychotropic drugs may be helpful. Hospitalization with a view toward substitution of a different neuroleptic grouping may be preferable for moderately severe cases. An entirely different class of antipsychotic drug may be employed, one which has little propensity toward this movement disorder, such as reserpine. If the offending neuroleptic is discontinued without substitution of another, there will be a temporary increase in the intensity of the movements (a form of withdrawal sensitivity) of the receptors. The APA report indicates a 50 percent reduction in tremor one or two years after total cessation of neuroleptic in a high percent of cases of drug-induced tardive dyskinesia. [1,3]

If a neuroleptic is deemed essential, the dosage should be reduced to the lowest level consistent with the functioning sought by the patient and doctor. Neuroleptics may be combined with benzodiazepines or propanolol to achieve a lower dose. Reserpine also may be combined with a neuroleptic. Anticholinergic drugs as well as antihistaminic drugs should be avoided as far as possible because they intensify the movements.

The issue of drug-free periods is best referred to consultation, as those patients whose receptors are hypersensitive to begin with will often regress more rapidly when medication is withheld and are difficult to identify and screen out of such a program.

The causes of tardive dyskinesia are imperfectly understood, and there is no definitive treatment short of gradual and total discontinuance of neuroleptic. The majority of patients and their families reject this solution as incompatible with the requisite quality of life sought outside an institution.

References

1. Granacher, R.P., Jr. "Differential Diagnosis of Tardive Dyskinesia: An Overview." *Am J Psychiatry* 138 (1981):10.

2. American Psychiatric Association. *Task Force Report 18: Tardive Dyskinesia.* Washington, DC: APA, 1980.

3. Jeste, D.V. and Wyatt, R.J. *Understanding and Treating Tardive Dyskinesia.* New York: Guilford Press, 1982.

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The Library Page

Getting the Best Results from Your Literature Search Request

Dr. N. O. Smoking calls to complain about the Medline search he requested on lung cancer. "There were pages and pages of citations, and I'm not looking through all that to find what I want!" I. M. A. Skilled MD writes a letter of complaint about his search on chondrosarcoma of the left middle fossa. "I got a bunch of stuff on the skull, but nothing says left middle fossa in the title." Dr. B. Well sends back her search on complications of pneumothorax with the notation "This isn't what I want at all!"

What has happened? Is the librarian doing computerized literature searching that incompetent? Are the databases subscribed to by the library irrelevant, outdated, poorly indexed, or what? Isn't the librarian listening to what the doctor is asking? Let's look at what happened.

Dr. Smoking's secretary called and said the doctor wanted "major articles" on lung cancer. The librarian asked what kind of cancer and whether diagnosis, treatment, or etiology was the major interest. The secretary didn't know. The librarian began by searching on the subject heading *lung neoplasms*, including all its more specific subtopics. Not surprisingly, there were over 4,648 articles for the last two years. The librarian searched *lung neoplasms* again, without subtopics and as a major point, taking out foreign language articles and animal studies. There were still 1,539 citations. The librarian further narrowed the retrieval to review only articles or those from the core list of *Index Medicus* journals. She also deleted letters, editorials, and news items. Uncertain how to limit the retrieval any further, the resulting 81 citations were sent to Dr. Smoking.

When Dr. Smoking called to complain, the librarian tried to find out what he actually wanted. After a few minutes and some pointed questions, it was clear Dr. Smoking really needed information about lung neoplasms and asbestosis. A subsequent search with these two subject headings as major indexing points produced a list of 28 highly relevant citations. Dr. Smoking was now happy. If his initial request had been specific, both the librarian and the doctor would have avoided wasted time, effort, and tempers.

Dr. Skilled's problem was totally opposite. *Chondrosarcoma* is a subject heading used by indexers at the National Library of Medicine. However, there is no specific heading for left middle fossa or even middle fossa. The librarian searched for middle and fossa as text words, words occurring in the titles or abstracts of articles. This retrieved some citations, but none indexed under *chondrosarcoma*. Since the middle fossa is part of the skull, the librarian tried matching articles indexed under *skull* or its more specific subtopics or *skull neoplasms* with those indexed under *chondrosarcoma*. The 15 citations that matched were printed. Possibly one of the articles might at least mention the middle fossa or help in some other way. Dr. Skilled received a "next-best-thing" search because his actual request turned out to be more specific than the articles being written.

Dr. Well's search posed still different dilemmas. Complications of pneumothorax seems to be a clear, specific topic. However, there are two distinct medical subject headings, *pneumothorax* and *pneumothorax, artificial*. Because of the way Dr. Well phrased her request, the librarian searched for complications of the disease pneumothorax. As luck would have it, Dr. Well actually wanted information on the adverse effects of the artificial pneumothorax procedure. Had the librarian realized the precision of the subject headings available or had Dr. Well given a more detailed explanation, the problem could have been avoided.

From the preceding examples, one can see several ways to improve the quality of searches requested. First and foremost, make sure the request is clear. The physician does not have to speak to the librarian personally. However, if the search request is relayed by a secretary, hospital librarian, or other third party, they need to understand the request. Not long ago, the library received a written request: "fiberglass allergies lung diseases." How are these terms to relate? Or are they three separate searches? The librarian assumed the topic was fiberglass as a cause of allergies or lung disease. Another physician asked for a search on chemical mediators of vasodilation. Did he want the effect of various drugs on vasodilation or information on the neuroregulators naturally occurring in the body?

Do not assume the librarian is intimately knowledgeable about the specialty or disease in question. She probably has extensive training in computerized literature searching and other library skills, but her medical knowledge may have been acquired as needed on the job. When in doubt, explain. A recent search on nasal oxygen and flap viability presented some problems. There is a subject heading *surgical flaps*, but how is nasal oxygen to be translated into a subject heading? Should the librarian try *oxygen inhalation therapy, intubation*, or *masks*? One might assume that this flap is somewhere on the face where nasal oxygen is interfering with survival, but is that actually the problem?

Incorrect spellings often make a huge difference. The librarian can sometimes infer the correct spelling from dictionaries, textbooks, or text word searching, but this is far from foolproof. A physician recently wrote requesting information on hypersensitivity and beclomethosone or super oxide diomutase. The librarian finally deduced that the subject headings *beclomethasone* and *superoxide dismutase* must be the real topics.

Medical and Chirurgical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian

Obviously, the more incorrect the spelling, the less likely the information will be found.

As we have seen, the search request should be specific. If the physician asks for "anything" on candidiasis, he may get anything. Someone who asks for "everything" may receive a large number of citations. "A few good articles" or "the basics" may be interpreted in various ways by the librarian. In general, it is easier to broaden a narrow search into a "next-best-thing" than trying to narrow an "anything" search.

With any search request, the librarian initially attempts to translate the question into medical subject headings used by National Library of Medicine indexers. There are over 14,000 such headings with about 100 terms added each year to index new drugs, procedures, and concepts. For example, a question regarding laser surgery for keloid scars would translate into *keloid* and *lasers*. Indexers are instructed to index to the most specific term, and often this can be quite specific indeed. There are separate subject headings for *lupus erythematosus, systemic* and *lupus erythematosus, discoid* and for *depression* and *depressive disorders*. The broad heading *respiratory function test* has some 35 hierarchical subtopics including *airway resistance, vital capacity, ventilation-perfusion ratio, forced expiratory volume,* and *spirometry*. There are also subheadings, such as *drug therapy, adverse effects,* and *trends,* that can be attached to medical subject headings to make retrieval even more specific. It is to the librarian's advantage to use this ready made indexing if possible.

However, there are also times when indexing is not specific enough. Information on closing a medical practice is lumped under *practice management, medical.* Many surgical techniques are indexed under the disease with the subheading *surgery*, or *surgery, operative* or one of its subtopics. When available subject headings are inadequate, the librarian can combine them with text words, as she attempted in the search for Dr. Skilled. Sometimes, however, this results in what librarians call "false drops." For example, when searching for information on physicians dropping their malpractice coverage, the librarian would probably start with the subject headings *malpractice* or *insurance, liability.* She could then try text words like drop, discontinue, cancel, etc. This would pick up relevant citations, as well as articles like one detailing an insurance company's decision to discontinue a reduced fee for first-year physicians.

As powerful as National Library of Medicine's indexing system is, there are limitations. For pregnancy occurring after tubal ligation, the librarian is instructed to search *sterilization, tubal* and *pregnancy*. This retrieves both the desired citations and articles discussing sterilization after pregnancy. There are times when relations between subject headings such as before *v* after, long-term *v* short-term, caused by *v* treated by can be difficult to specify. The librarian usually prefers to err on the side of providing some irrelevant citations rather than miss "good" ones.

When a physician requests older citations or a search covering a large time span, the librarian must take into account any changes in subject headings. When new terminology is added to the indexing list, older citations are sometimes revised, sometimes not. For late-breaking topics indexing is often not worked out for a year or more. Toxic shock syndrome was eventually assigned the existing subject heading *shock, septic. Acquired immunodeficiency syndrome* became an official medical subject heading in 1983. For citations before that time, the librarian must rely on text words and the older, more general heading *immunologic deficiency syndromes.*

Obviously, the physician need not know all the fine points of indexing policy and medical subject heading definitions. The librarian usually has formal training in search techniques, subject heading use, and online system capabilities and limitations. Beyond this, she often attends seminars on specific files, new software features, medical subject heading additions and changes, and so on. While the typical "medline" search is generally performed against the Medline file, its backfiles, or the Health Planning and Administration File, there are about a dozen other files available from the National Library of Medicine, as well as a bewildering array of databases from other vendors.

Let's return to our three fictional physicians. When they next request a search, remembering the following points can help assure a successful result.

1. State the request in clear, specific sentences. Spell any unusual words, especially drug names, bacteria, eponymous names. Make sure the relationship between terms is clear. Consider aspects like drug effects, diagnosis, or therapeutic use to make the request appropriately specific. Be careful of phrases such as "a few good citations" and "the best stuff."
2. Decide how many years the search should cover. The Medline file itself includes the current three years, but six backfiles extend coverage back as far as 1966. Are older citations relevant?
3. Decide if only English language articles are desired. Foreign language articles are not translated by the National Library of Medicine or by MedChi.
4. Decide whether animal studies would be relevant to the topic.
5. Include any other limitations, such as age of the patient, geographical location, citations from a specific journal or by a specific author.
6. If someone is calling for you, make sure he or she understands the request and can answer the librarian's requests for clarification.
7. If the search is an emergency or must be ready by a certain time, let the librarian know. Usually the day's requests are batched and searched the next work day. Questions or uncertainties about the request can delay results for several days or even longer.

When you receive a search, please let us know if it is not satisfactory or not what you expected. The problem may be as simple as a misspelled word or a bad phone connection when the search was called in. Perhaps your topic is too new to have articles written, published, and indexed yet. Maybe the topic was unexpectedly broad or narrow. The librarian will discuss corrections or modifications to the initial request. On the other hand, the librarian also would like to hear about searches you found helpful, "on the money," or—we hope for everyone concerned—outstanding!

SUSAN E. HARMAN
Reference and Circulation Librarian

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during January 1986.

	No. of Citations
1. Diagnosis and treatment of acromegaly	28
2. Differential diagnosis of thoracic outlet syndrome	19
3. Epikeratophakia	32
4. Fetal death and the umbilical cord	20
5. Iatrogenic addiction	17
6. Laser surgery for keloids	9
7. Narcotic epidural injections	43
8. Resuscitation, passive euthanasia, and decision making	31
9. Subdural empyema	16
10. Treatment of penile induration	24

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

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Commentary

The Ideal Chart

If there were a contest with the designation "Finding the Ideal Chart" I believe our profession would be judged as having a long way to go. First, there is always the problem of legibility. It continues to be discouraging that those of us in this presumed educated profession have, for the most part, never learned to write clearly. Is it too much to suggest that if one has something to convey it should be readable? We have liberty to sign our names as if to remain anonymous, but in our profession, our notes should be important and significant enough to be readable. In some hospitals the basic chart record is not without its smudging.

Why I make such an issue of this matter should be obvious to everyone. A chart reflects a patient's medical status and, increasingly, his/her legal status; it is a document on which is based everything vital to a human being at the time of its formation.

I have been reviewing records over an extended period (more than I originally intended), and I have come to the conclusion that the medical profession collectively has not passed the grade for an acceptable chart. This does not mean that the care of the patient is inadequate or lacking in quality; it does mean that the reflection of such care in the record is lacking. This is further supported by a notation in the Fall 1985 *Hopkins Medical News* in which Robert G. Petersdorf MD, Dean and Vice-Chancellor of the University of California at San Diego, expresses his view that "we depend on communication with patients, their families, colleagues, the public, and even the government—yet we are masters of illegible handwriting, atrocious spelling, jargon, and incomprehensible abbreviations."

Have I any positive suggestions? Yes, and this was made easier for me recently when the Church Hospital circulated a page titled "Documentation Audit." With modest modification, here it is:

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1. There is a completed H and P accomplished promptly on admission; especially essential in emergency cases
2. There is a clear description of the clinical problem (admission note)
3. There is a plan for work-up and management
4. There are progress notes at intervals to explain what is going on (this, in stable patients); and daily or more often in unstable patients
5. Progress notes are expected to document clearly the patient's status, including changes or complications
6. The reason for specific treatment is documented
7. There is continued comment on patient's documented response to therapy
8. There is documented justification for special tests ordered, a review of test results is included
9. An analytic, clear view of the hospital course, response to treatment, and outcome is documented, and above all, this documentation justifies each day a patients stays in an acute hospital bed
10. The final listing of diagnosis(es) and/or procedures is complete and accurate

These ten suggestions plus legibility would contribute to an attainable ideal chart but may be defeated by lack of legibility. What I am trying to convey is meant to be constructive and is done, not by any authority vested in me, but based on experience of chart review made more difficult by absence of the ideal chart.

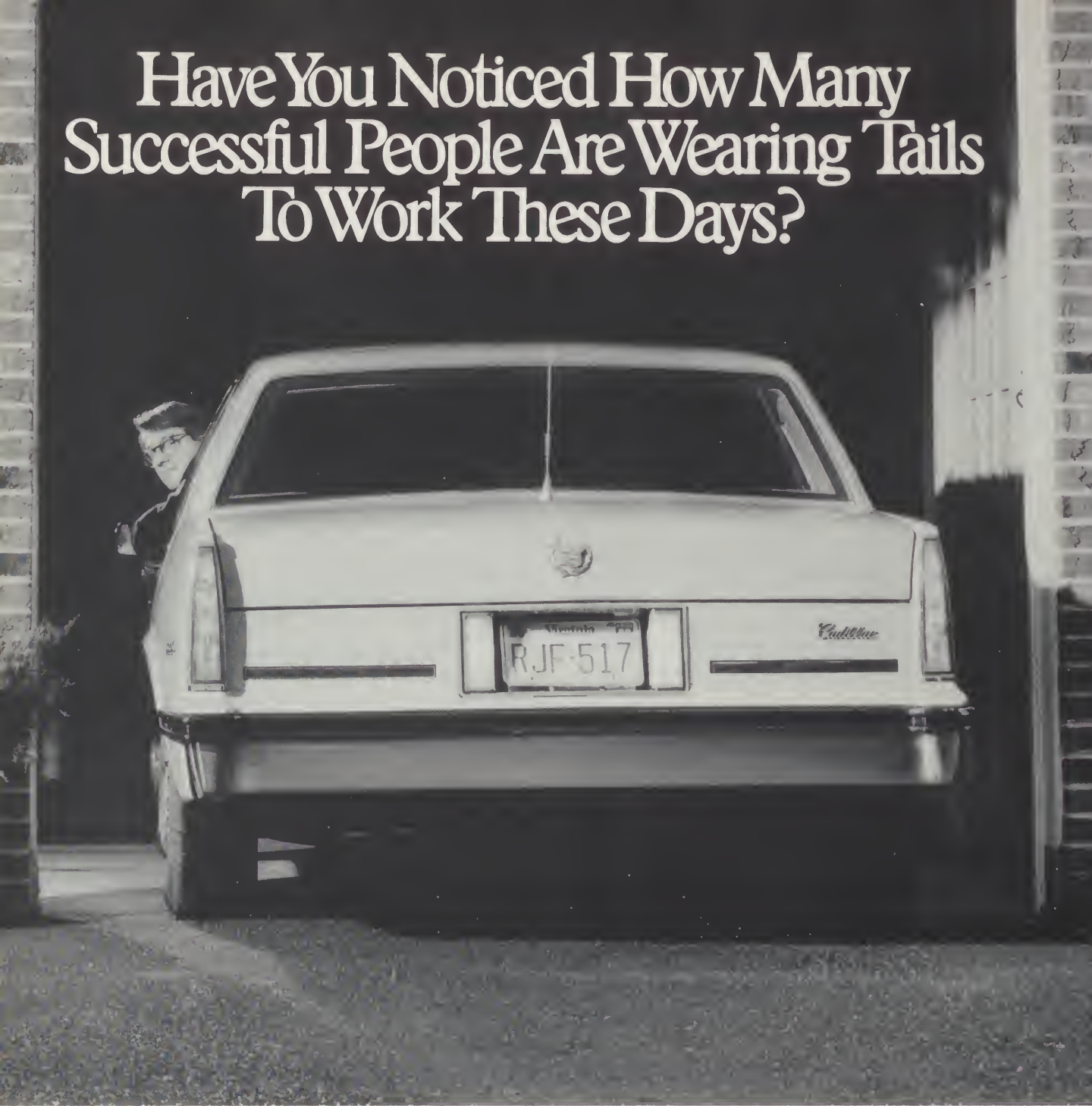
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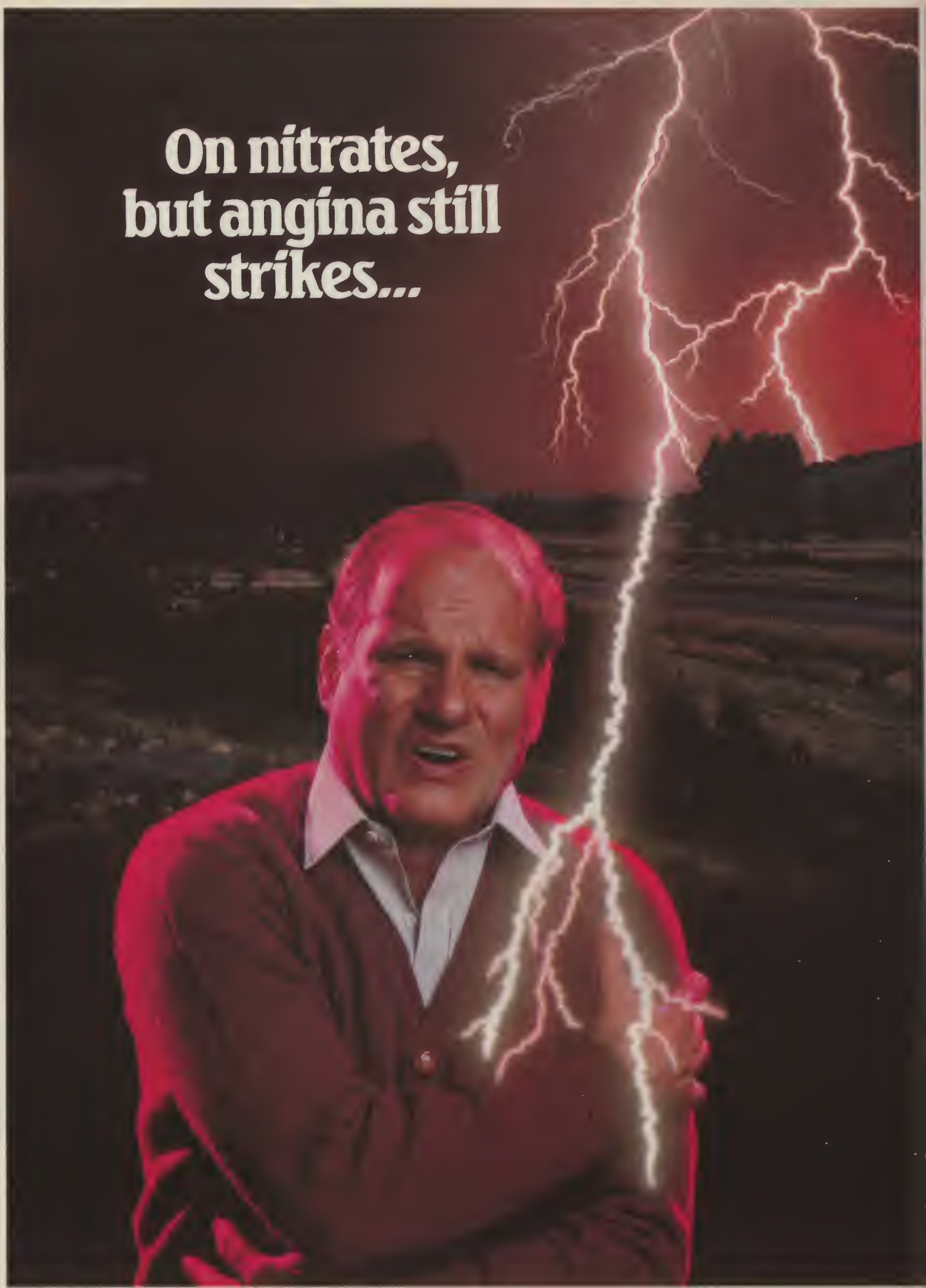
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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings*.) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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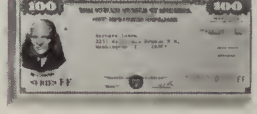


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Leading a Department of Medicine in the 1980s

JOHN A. KASTOR MD

Departments of Medicine have become large organizations with many members, complex administration, and constantly changing problems and opportunities. Leading such departments presents academic physicians with challenges most never previously considered. The recently appointed chairman of the Department of Medicine at the University of Maryland School of Medicine discusses his approach to the educational, clinical, research, and administrative reponsibilities and outlines how his Department will try to perform its duties in a time of reduced resources and increased competition for medical care.

Dr. Kastor is Theodore E. Woodward Professor of Medicine and Chairman, Department of Medicine, University of Maryland School of Medicine; Physician-in-Chief, University of Maryland Hospital, Baltimore. This article is based on a talk delivered to the Baltimore City Medical Society, October 3, 1985.

The role of the chairman has diminished since the days of the great professors—perhaps because there are no longer any great chairmen, only great committees.[1]

On January 1, 1984 I became Chairman of the Department of Medicine at the University of Maryland (UM) and, like most new chairmen, assumed a job for which I was barely prepared. While directing the Cardiology Division at the Hospital of the University of Pennsylvania, I observed how my chairman led the department there. But much of what a chairman does was still unknown to me. So, once again, I had to learn on-the-job, not the most efficient way of becoming knowledgeable but a time-honored technique in medicine.

As soon as possible after arrival, a new chairman from another institution must become an integral part of the medical school and its teaching hospital. This acculturative process is both intellectual and psychological. It involves incorporating that peculiar quality known as "institutional memory," the character of the organization that includes its history, purpose, style of operating, and the perceptions held by the faculty, staff, graduates, the community, and those who use its services.

For UM's Department of Medicine, the institutional history resides in Theodore E. Woodward MD, Chairman from 1954 to 1981. During the past three decades he influenced Maryland graduates more than any other member of the Department. Most alumni remember well his uniquely effective teaching that combined medical knowledge with history and ethics. Fortunately, Dr. Woodward continues to participate actively in the Department's educational activities. He teaches each group of third-year students and supports the new administration through useful and friendly suggestions without a hint of interference—a congenial role for Dr. Woodward and one much valued by me.

The deeply felt respect for Dr. Woodward's educational skills and leadership led his colleagues to endow a professorship assigned to the departmental chairman. Professorships are expensive these days, but the Woodward chair was established quickly because of the high regard and affection with which he is held by the faculty of the Medical School and so many of its graduates.

Education

Dr. Woodward's high standards for education meant the new Chairman did not need to devote much attention to revising this activity. UM's Department of Medicine is proud of the training it gives students in the second year (introduction to medicine), third year (clinical clerkships), and fourth year (subinternships and specialty electives).

A preceptorship program has been added for third-year students in which members of the faculty meet twice each week with groups of 10 students who are taking their 12-week medical clerkships. The students present cases, and the preceptors lead discussions designed for the students' particular requirements at this stage of their education. These sessions supplement attending rounds, daily lectures in Medicine, and practical experience gained from participating in the clinical care of patients in the University of Maryland Hospital and the Baltimore Veterans Administration Hospital.

Clinical Care

The chairman of each clinical department at UM also directs his service at the University of Maryland Hospital. For the Chairman of Medicine, the title of Physician-in-Chief carries extensive responsibilities of great importance to the success of the Department's programs. Keeping the house officers productive and happy, despite night call and the many day-to-day irritations of a residency, is an important responsibility. We try to combine a humane schedule with high standards and superior teaching and supervision. A successful house staff program ranks high in our plans for the Department's growth. Our house officers become our specialty fellows, and the best of them become our junior faculty.

Making sure the patients in the 250 medical beds at the University and Loch Raven VA Hospitals receive

the best possible professional care occupies much of my time and that of Frank M. Calia MD, Vice-Chairman of the Department and Director of the Medical Services at the VA Hospital. We regularly conduct rounds with the house staff and students even when we are not on service as "attendings." These excursions keep us informed about the state of the inpatient departments.

Improving the physical and functional features of both hospitals is a continuous activity. At University Hospital we have just completed renovation of our Medical Intensive Care Unit and will soon begin a similar project for our Coronary Care and Progressive Care Units. Gradually all the bedrooms, even in the relatively recently constructed North Hospital, will be renovated to improve their function and appearance.

We have paid particular attention to outpatient facilities in keeping with the national priority of containing medical costs by reducing inpatient and expanding outpatient activities. In the spring of 1985 the Department opened a facility to treat outpatients on the third floor of the North Hospital building. Particular attention was paid to efficiency, courtesy, and attractive surroundings—we are particularly proud of our photographic collection of Baltimore and Maryland scenes hanging on our walls.

In the first eight months of operation, the number of outpatient visits in our Faculty Practice Offices increased by 28 percent, thanks, we believe, to the patients' satisfaction with our professional and personal services. An interdepartmental outpatient facility, the University of Maryland Professional Building, recently opened in a fully renovated, late nineteenth century building at the corner of Paca and Redwood Streets to provide similar services for other departments; we will see some of our patients there.

University Hospitals

Developing and improving facilities for patients is an activity that occupies increasingly more time and attention from chairmen. Most university hospitals, like Maryland's, are relatively old (the euphemism "historical" is sometimes applied) and were founded downtown, now relatively far from areas where many potential patients live. Community hospitals either have been organized in suburbs or, following their clientele, have moved there. University hospitals seldom have been able to do this, partly because of the expense of transferring an academic medical campus but also because the leaders of university hospitals have felt a continuing responsibility to provide care for residents who live nearby.

In many cases the local patients are the more needy members of our society, often unemployed and afflicted with severe and complicated illnesses.[2–4] At one time these patients were treated as "clinical material" on which the house staff trained while patients with private means were cared for by the faculty. That distinction, fortunately, is fading. Every patient admitted to a medical bed in University Hospital becomes the private patient of a faculty member, whatever the patient's status on entering the hospital. The attending physician and house staff care for the patient together, with the attending visiting the patient every day just as he/she would for someone admitted from his/her office. This system provides more thorough supervision, clearly improving the quality of medical attention given patients whose care previously had been given almost entirely by house officers.[5]

The Faculty

Providing such care requires a relatively large staff, and one of the first questions I had to resolve after arriving in Baltimore was: Should the clinical faculty be predominantly full time or volunteer? Based on experience elsewhere and after extensive discussions with other internists in academic medicine, I decided to develop our services at the principal teaching hospitals mainly on a full-time basis with volunteer faculty playing primary roles at the affiliated hospitals and important auxiliary clinical and educational functions at University and Veterans Administration Hospitals.

Full-time Clinical Faculty For decades clinical departments employed a cadre of full-time faculty members, most of whom were engaged principally in research or administration.[1,6] In the older schools much of the clinical care and teaching was performed by volunteer or part-time faculty who maintained their private offices outside the hospital or, as geographic full-time faculty, received or rented space from the hospital and may have received a small stipend for educational or administrative tasks. Such physicians and surgeons billed for their services and paid for their office assistants. In return for admitting privileges, they assumed regular attending duties in the inpatient or outpatient departments. Despite great institutional loyalty from many volunteer faculty physicians, the principal responsibility of such doctors was to the patients in their offices or in the hospital. The medical school depended on their help but could not always rely on it.

In the full-time clinical system physicians participate through a group practice administered by the specialty divisions, the departments, the school, or the hospital. The members in such a system are housed and supported by the institution. They are paid salaries, often supplemented by bonuses based on productivity. The size of such groups permits easily arranged coverage

when a member is on service, away at a meeting, or ill. Thus the attending or consulting physician seldom needs to leave rounds to attend a private patient. A colleague will substitute for him or her. A sufficiently large group practice also permits purchase of benefits such as life and malpractice insurance at more competitive rates than could be obtained by an individual doctor or a small group.

One of the greatest advantages of the group is the colleagiality such enterprises foster. Close to clinical and research colleagues, the full-time clinical faculty member can practice more easily, up-to-date in knowledge with expert colleagues nearby.

But can full-time university hospital clinical groups develop practices sufficiently large to support them? That question is raised particularly in this time of increasing competition among physicians and hospitals for patients. Will patients travel "downtown" to see their doctor or to be admitted to his/her hospital when they can visit a physician five minutes away in a shopping center, a suburban office building, or community hospital? The answer is clearly yes, as demonstrated in the more successful university hospital group practices.

But patients will not come to us at Maryland just because we are available at Greene and Baltimore Streets. Stripping away the trappings of many private practices—convenience of a suburban office, easier parking, the perception of greater safety, the designer waiting rooms—patients want a doctor they can trust. Consider how we choose professionals (the lawyer, the dentist, or the doctor) whom we need. We usually pick the person first. Accordingly, at Maryland we are recruiting first-rate generalists and specialists who choose to practice with us because their professional lives will be richer for doing so. Two examples will illustrate this program.

Elijah Saunders MD, the former Chief of Cardiology at Provident Hospital, graduated from our medical school and its medical and cardiology training programs 20 years ago. He then left the medical center and developed one of Baltimore's most successful private practices in cardiology and hypertension. Despite his busy patient responsibilities, he actively conducted clinical research and became a recognized authority on hypertension in blacks. Now back at his alma mater, Dr. Saunders maintains a busy practice assisted by young faculty members whom he and the department have recruited. He also leads our department's newly established Hypertension Division and is the Clinical Director of the University of Maryland Hypertension Center.

Herbert Kushner MD, a graduate of the other excellent medical school in Baltimore, was a house officer at the Johns Hopkins and University of Maryland Hospitals and chief resident at University Hospital. After several years on our faculty, he left to become Chief of Medicine at Lutheran Hospital. A year ago we convinced Dr. Kushner to return to Maryland full time as our Senior Medical Consultant in the Division of General Internal Medicine. He has become a role model to our house officers and junior faculty as a highly competent, dedicated clinician-educator whose career can flourish in the group practice of the Department of Medicine at the University of Maryland Hospital.

In addition to Drs. Saunders and Kushner we have recruited seven full-time clinical members in our specialty divisions and eight internists in our General Internal Medicine Division whose principal responsibilities are to practice medicine and teach. We will continue to add clinical faculty who are strongly motivated to participate in the colleagial and educational work of a medical school clinical department. Such a way of life may not be suitable for all physicians but can be extremely satisfying for those who choose it.

Fortunately at Maryland, promotion (the bane of the clinical faculty) does not present the problem that it may at other schools. We have a special "medical school" track specifically designed for full-time clinician-educators. The criteria for promotion in this track were developed to reward the outstanding teacher with a successful clinical practice who also participates in scholarly and other useful academic activities. That person is not expected to spend most of the time in the laboratory or to publish widely; his/her value to the medical school lies primarily in educational and clinical contributions.

Volunteer and Part-time Clinical Faculty Although full-time faculty provide much of the clinical care and teaching in the Department of Medicine, volunteer and part-time faculty make important contributions to our programs. They admit patients to our hospitals, attend in the inpatient and outpatient units, and teach medical students and house officers often at the community hospitals where many are based. Without their vital help, we could not conduct successfully all our educational programs.

Some volunteers have chosen to participate to the extent that they warrant part-time employment in the Department with appropriate salaries. An outstanding example of such faculty members is William A. Valente MD, a 1974 graduate from the University of Maryland School of Medicine, who trained as one of Dr. Woodward's medical house officers and became Chief Resident. After two years of fellowship in Endocrinology and Metabolism at the University Hospital, he obtained further experience as an investigator in the Laboratory of Biochemical Pharmacology at the National Institutes of Health. Dr. Valente then joined our faculty on a full-

time basis until 1983 when he decided to open his own office and practice endocrinology at Mercy Hospital, one of our principal affiliates, and at University Hospital. Several times each year, Dr. Valente attends on the medical service or consults for his specialty division. He is one of our most popular and successful teachers, a model clinician-educator. Despite his busy clinical and teaching schedule, Dr. Valente continues his research in thyroid disease.

HMOs, PPOs, et al.[7] In addition to these traditional methods of appointing clinical faculty and providing professional care in a medical school and its teaching hospitals, arrangements are being developed for the clinical departments at Maryland to participate in the growing activities of Health Maintenance and Preferred Provider Organizations and other contemporary medical systems. Our full-time and volunteer faculty have become increasingly affiliated with other Baltimore hospitals. We share important clinical and educational programs with Mercy and Union Memorial Hospitals (our Department's primary affiliates) and with other community hospitals. Faculty from the Division of General Internal Medicine provide continuing medical care at Montebello Hospital and the Waxter Center for Senior Citizens.

Research Faculty The research-oriented colleagues of the full-time and volunteer clinician-educators constitute that portion of the faculty who formerly were the only full-time members of Departments of Medicine. Their career goals are different; they have spent many years training to discover with the tools of the basic or clinical laboratory how disease is caused and how it can be treated.[5]

Research now is so sophisticated that for investigators to be successful, they must devote 70 to 80 percent of their time to their work. The days of the triple-threat faculty member who excelled equally in research, clinical knowledge, and teaching are gone, if they ever existed. We therefore arrange the schedules of our investigators so they can spend most of their time doing research.[8] Of course, they must try to support their work by obtaining research grants, but contrary to recent complaints, support is available, although less generously than in the past and more likely to be awarded to those investigators doing the best work.

Research

Why do we emphasize research? First, we are a university department and to advance knowledge is a basic function of universities.

Second, from research come advances in diagnosis and treatment, and patients seek institutions where such work is being conducted so they may benefit from recent developments. To deserve such referrals, Maryland must contribute to the advancement of knowledge.

Third, departments of medicine that lack emphasis on research will never achieve excellence among the nation's medical schools. We cannot attract and keep first-rate faculty members and trainees unless a spirit of intellectual accomplishment constantly fills our working lives. It must permeate all our thinking, causing each colleague to question his/her clinical decisions in view of the most recent data and to search for better understanding of disease to help patients get well faster. The education of students and postgraduate trainees also suffers if we emphasize only the past and not the future in our teaching.

Worthwhile research is basic to all that outstanding departments of medicine do. It advances knowledge, stimulates those we teach to learn more successfully, and contributes directly to care of the sick.

Division Heads

The quality of leadership, in academic medicine as in most endeavors, determines as much as any factor, the success or failure of the enterprise. Consequently we are investing heavily in those individuals selected to lead the divisions of the Department of Medicine: Cardiology, Dermatology, Endocrinology, Gastroenterology, General Internal Medicine, Geographic Medicine, Hypertension, Hematology, Infectious Diseases, Nephrology, Oncology, Pulmonary Medicine, and Rheumatology. Most of the Division Heads are or will be primarily investigators, academic physicians who have demonstrated that they can perform useful research and now want to apply their skills with broader opportunities for accomplishment.

So far we have recruited two new division heads. Barry S. Handwerger MD, an eminent immunologist, has returned to his medical school (class of 1968) to lead the Division of Rheumatology and Clinical Immunology, after training at the National Institutes of Health and faculty positions at the Mayo and University of Minnesota Medical Schools. Our new head of the Pulmonary Division is Lewis J. Rubin MD, an authority in pulmonary hypertension, who comes to Maryland after attending the Albert Einstein College of Medicine in New York and postgraduate training in internal medicine and pulmonary medicine at Duke. Most recently, he led the Pulmonary Division at the Dallas Veterans Administration Hospital and was Associate Professor of Medicine at the University of Texas Southwestern Medical School. Recruitment continues as we search for new leaders in cardiology, gastroenterology, and infectious diseases.

Administration

Managing a growing department of 96 full-time physicians and investigators, 73 house officers, 65 specialty fellows, and an annual budget of $23,000,000 needs more than a Chairman and a secretary with a calculator.[9] Such was the staff in many departments not too many years ago. Departmental administration now requires a relatively large professional group.

The leader of the Department of Medicine's administration at Maryland is Patrick W. Breault who was recruited to Baltimore from Ann Arbor where he managed the professional fees office of the University of Michigan's Department of Medicine. Mr. Breault's staff of 36 conducts the department's business through administrative offices of Budgets, Grants and Contracts, Marketing, Office Management, Operations, Personnel and Payroll, and Professional Fees. In the clinical divisions, business managers directly assist the division heads and work closely with Mr. Breault's staff.

Helping these and other activities become successful constitutes most of a chairman's job now, and I suspect the basic role of the chairman will not change in the near future. There always will be doctors-in-training to teach, educational programs to develop, patients to care for and their services and surroundings to improve, research to be encouraged and supported, faculty to be recruited and developed, and papers to be pushed around the desk.

Some see a chairman's role as not a happy one,* and this may be so if an investigator or clinician takes the job believing he/she can continue to work as in other positions held earlier in his/her career. Satisfaction must now be less personal, more generalized, more derived from others. Chairmen's pleasures, such as they are, come from the triumphs of their colleagues. But that can be quite gratifying.

* "Leading the departments of medicine of American medical schools . . . we have a group of harried, exhausted, overworked, albeit well-paid individuals, who see themselves as unsuccessful professionally and who are perceived as such by key members of their departments."[9]

References

1. Petersdorf, R.G. "The Evolution of Departments of Medicine." *N Engl J Med* 303(1980):489–96.
2. Iglehart, J.K. "Moment of Truth for the Teaching Hospitals." *N Engl J Med* 307(1982):132–36.
3. Ebert, R.H. and Brown, S.S. "Academic Health Centers." *N Engl J Med* 308(1983):1200–1208.
4. Relman, A.S. "Are Teaching Hospitals Worth the Extra Cost?" *N Engl J Med* 310(1984):1256–57.
5. Petersdorf, R.G. "Academic Medicine, No Longer Threadbare or Genteel." *N Engl J Med* 304(1981):841–43.
6. Harvey, A.McG. *Science at the Bedside.* Baltimore: the Johns Hopkins University Press, 1981.
7. Hoft, R.H. and Glaser, R.J. "The Problems and Benefits of Associating Academic Medical Centers with Health-Maintenance Organizations. *N Engl J Med* 307(1982):1681–89.
8. Petersdorf, R.G. "Is the Establishment Defensible?" *N Engl J Med* 309(1983):1053–57.
9. Braunwald, E. "Can Medical Schools Remain the Optimal Site for the Conduct of Clinical Investigation?" *J Clin Invest* 56(1975):i–vi.

. . . in May in *MMJ* . . .

AIDS Update - Drs. Gong, Kelen, and Sivertson
Department of Emergency Medicine
The Johns Hopkins Hospital

Guidelines for Tuberculosis Control
State of Maryland
Department of Health and Mental Hygiene

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Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

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Gatekeeper

ARTHUR E. COCCO MD

That Medicaid presents a problem for states because of increasing costs is not questioned. How to deal with the costs while assuring quality of care, accessibility to the best care available, freedom of choice for the patient and the physician, and the American medical tradition of fee-for-service is a problem. The PCN/Gatekeeper concept is one alternative being considered by increasing numbers of states, HMOs, IPAs, third-party insurors, and the federal government. By assigning each patient to a primary care Gatekeeper physician who has total responsibility for medical care and who is financially at risk, advocates believe costs can be constrained.

Dr. Cocco is a gastroenterologist in private practice in Baltimore. Correspondence: 20 East Eager Street, Baltimore, MD 21202.

Increasing interest in the "Gatekeeper" concept (Primary Care Network or PCN, Case Management System or CMS) by the federal and state governments as a means of reducing accelerating medical costs in Medicaid programs deserves careful analysis by patients and health care providers.

RESOLUTION: 27

American Medical Association
House of Delegates (Passed December 1985)

Introduced by: Washington Delegation

Subject: Value of a "Gatekeeper"

Referred to: Reference Committee A
(Richard D. Eberle, M.D., Chairman)

Whereas, Increasing numbers of managed health care systems are being organized; and

Whereas, Many of these new systems utilize a "Gatekeeper" concept; and

Whereas, There is no body of knowledge that properly identifies the value of that role; therefore be it

RESOLVED, That the American Medical Association undertake a study* of the "Gatekeeper" system and report to the House of Delegates methods of establishing a value for that professional service.

How the System Works

The patient chooses or is assigned to an approved primary care physician (or HMO) who in turn is responsible for the overall medical care of that patient and must approve all diagnostic studies, specialty referrals, hospitalizations, and so on. A nominal monthly fee is provided the physician by the contractor (usually the state Medicaid agency) as well as reimbursement for each patient encounter. All diagnostic studies, referrals, and hospitalization are paid for only if approved by the PCN physician. This physician may or may not be at financial risk, but if the individual use and cost averages exceed certain percentiles, the performance of the physician will be "reviewed," sometimes resulting in warnings or removal from the program. The patient may or may not have freedom of choice in choosing a PCN physician or a referral physician, but many proposed plans are directed toward eventual elimination of the patient's freedom of choice in selecting a physician. In addition, because not all physicians will participate in the program, limitation of freedom of choice is inherent in the Gatekeeper concept.

What's Happening

The Omnibus Reconcilliation Act of 1981 (Section 2175, Public Law 97-35) approved by Congress provided states with the option of applying for waivers of the prior Medicaid requirement of freedom of choice to choose health care providers without intervention. The Health Care Financing Administration (HCFA) then published its interim final regulations, BPP-181-SC, Medicaid Programs; Freedom of Choice: Waivers of Exceptions to State Plan Requirements: 46 Federal Registry 48525, October 1, 1981. The American Society of Internal Medicine objected, stating to HCFA (1) that regulations should have been published first as a notice of proposed rule making to allow input by interested parties "consistent with hearing and comment requirements" (House Report 97-208, page 964) and (2) that "the regulations are flawed because they provide inadequate guidance to states on how to make their Medicaid programs most cost effective without denying patient access to quality medical care."[1]

The advice went unheeded. Subsequently, the United States General Accounting Office, stating that "current regulations contain little guidance on the standards your Department will apply in evaluating whether state requests for waivers of recipients' freedom of choice meet the requirements contained in the law," has recommended to Secretary Schweiker of Health and Human Services "that you provide additional guidance to states on the information necessary to show compliance with the law for waivers to limit freedom of choice of Medicaid recipients."[2]

The legislation and regulations subsequently have led to the development of the Gatekeeper concept for Medicaid enrollees. Actually the essentials of the program have been in place in some existing HMOs. The American College of Physicians has essentially approved the Gatekeeper HMO model and has stated that "a legiti-

* Fiscal Note: $10,000–$50,000, depending upon the nature of the study.

mate function of HMO patient management may include organizing its medical staff in such a way that limits direct access by patients to specialist care." To protect patients' rights, the ACP adds "prospective HMO enrollees should be advised of any patient's self-referral limitations and advised of the circumstances under which they can seek alternative services."[3]

One needs only to peruse the proceedings of the National Governors Association Conference on Medicaid and Primary Care Network/Case Management Systems, December 1981 to realize the profound impact the Gatekeeper concept will have on medical practice as we know it today. "The Network consists of individual or groups of primary care physicians and is augmented by a panel of specialists selected by the PCN or each primary care physician. Patients are 'locked in' to their primary care physician who approves all specialty care. Nonemergency self-referrals are not reimbursed. The primary care physician is financially at risk for primary care, specialty care and hospitalization. Reimbursement arrangements, however, may vary. They can be fee-for-service with a percentage of the fee held back to cover costs in excess of targeted amounts. If expenditures are less than expected, these 'hold back' funds are distributed at the end of the year as a bonus. Reimbursement can be a straight capitation arrangement in which the physician receives a predetermined payment for providing services to an enrollee. In either case, the primary care physician reviews and approves all expenditures made on behalf of his patient."[4]

Michigan has established a PCN program to include eventually 323,000 of Detroit's 400,000 Medicaid eligibles. Maryland's less restrictive program began July 1, 1982. California's PCN plan for Santa Barbara and Monterey counties will include negotiated fees not only for Gatekeepers but also for specialists. Effective January 1983, the California state Medicaid program (Medi-Cal) will be allowed to negotiate contracts with physicians to provide services to the poor on a prepaid basis. In St. Louis, Missouri and Grand Junction, Colorado, patients will be assigned to PCN physicians and will *not* have the right to choose the physician.

Medicare patients in Baldwin County, Georgia may join an experimental PCN program that is voluntary at this time. "Sometime in the future" Arizona's experimental plan for Medicaid is slated to cover business employee groups. Whether in the form of a PCN, HMO, or IPA, the Gatekeeper concept for Medicaid is being considered by many other states including Hawaii, Massachusetts, New Hampshire, New York, Ohio, Oregon, Pennsylvania, Tennessee, Texas, Utah, and Wisconsin.

Furthermore, the PCN has extended into third-party insurors and HMOs including Blue Shield, Prudential, INA, Wisconsin Physician Services, Group Health Plan of Northeast Ohio, and Safeco's United Health Care (now up for sale). This list also is growing and probably will continue to do so.

Advantages of PCN

Advocates find the Gatekeeper concept appealing for the following reasons:[4]

1. *PCNs can reverse expensive financial incentives in the fee-for-service system.* Although physicians receive only 19 percent of total health care expenditures, they are responsible for 75 percent of total health care costs in that they control decisions on tests, procedures, and hospitalization. By making the Gatekeeper medically responsible and financially at risk, a point of accountability is established. "The professional in charge will typically have a less expensive style of practice than the specialist." Furthermore, states may become "prudent buyers," selecting those providers who furnish the most cost-effective care.

2. *PCNs constrain patient misuse of the system.* By locking patients into a Gatekeeper and denying reimbursement for nonemergency out-of-plan services, unnecessary "doctor shopping" and costly nonemergency visits to emergency rooms and hospital outpatient departments can be curbed. Patients who abuse the system and incur unnecessary medical care expenses can be identified earlier.

3. *PCNs guarantee clients a point of entry into the health care system.* PCNs guarantee enrollees access and service to a physician for as long as the client accepts and adheres to conditions of PCN membership.

4. *PCNs are more flexible and easily established than traditional HMOs.* PCNs do not require new institutions or large alterations in existing relationships that physicians have with hospitals or other providers. Hence they may be established more easily, effectively, and perhaps less expensively.

5. *PCNs can lead to improved continuity of care.* Since a client is assigned to or chooses a particular Gatekeeper physician and that physician is responsible for total medical care during the period the patient adheres to the PCN membership conditions, continuity of care should improve.

Disadvantages of PCN

As with any health care system, PCNs have built-in disadvantages related to quality, accessibility, and costs.

1. *Marginal care.* Major differences in quality of care exist among physicians be they primary care, special-

ists, or board certified physicians. By assignment, PCNs may "lock-in" a patient to the care of marginal physicians.

2. *Restricted services.* By increasing the Gatekeepers control over the patient and placing him/her at financial risk, the Gatekeeper may not allow the patient to receive needed services, consultations, and care. This adverse incentive could lead to inadequate care.

3. *Overuse of services.* If the Gatekeeper receives a fixed payment for primary care and is not at risk for referrals, the Gatekeeper may refer as much care as possible to other physicians in order to maximize his income in relation to time used for care of the patients.

4. *Underuse of services.* If the Gatekeeper receives a fixed monthly payment for primary care regardless of patient encounters, he may discourage or delay patient visits thereby providing more time for other matters.

5. *Adverse selection.* If Medicaid enrollees have the option of joining a PCN or remaining in the fee-for-service system, the Gatekeeper could encourage his/her healthiest patients to join the PCN. The healthy patient would use or could be encouraged to use the PCN services infrequently. The Gatekeeper would continue to receive the monthly case-management fee, to his financial benefit. The chronically ill patient could be encouraged to remain in the fee-for-service program to maximize reimbursement.

6. *Physician overload.* Patients may sign up with the "best" physician thereby overloading his practice with healthy, ill, or both types of patients.

7. *Physician conflict.* "The success of PCNs rests, however, with the ability of the primary care physicians to monitor and, if need be, to challenge the authority of specialists. It is a role with which many physicians will be unfamiliar and it is not one to which many will easily adjust."[4] The primary care physician may not be willing or may be unable to fullfill this requirement. Whether he/she does or does not, significant conflict for the Gatekeeper is inevitable.

8. *Capping.* For specialty referral care, the number of return visits may be restricted or "capped," thereby limiting the access of patients to specialty care.

9. *Restriction of patients' freedom of choice of their physician.* A basic principle of a PCN is that the Gatekeeper will approve any additional physician referrals. In contrast, the medical care system in the United States has been built on the principle of freedom of choice for both the patient and the physician. The right of freedom of choice is removed in the Gatekeeper/PCN setting.

10. *Anticompetition.* Medical practice is inherently competitive resulting in the necessity of a physician to remain current in his skills. If the Gatekeeper has total control, there will be no competition and no incentive to continue to upgrade skills. Mediocrity is the anticipated result.

11. *Delayed diagnosis and treatment.* With incentives to reduce costs and limit services, delays in diagnosis and treatment can be anticipated. Short-term cost savings may be realized, but the short- and long-term effects on (1) the patient's emotional and physical well-being, (2) the medical consequences, and (3) the economic burdens of delayed diagnoses and treatments must be considered.

12. *Malpractice issue.* With incentives to limit services and referrals and with the resulting anticipated delays in diagnosis and treatment, the Gatekeeper places himself/herself in an exceptionally vulnerable position for malpractice claims. "A general practitioner who does not refer his patients to a specialist, where under the circumstances a reasonably careful and skilled general practitioner could and would do so, may be held to the standard of a specialist in the field."[5]

13. *Antitrust implications.* This issue is not settled, but restricting program providers in some situations can have antitrust implications.

14. *Union activities.* State agencies contracting with primary care physicians to serve as Gatekeepers may well find themselves negotiating with Gatekeeper physicians in a formal or informal collective bargaining setting for working conditions, management fees, and so forth. Unless the Gatekeeper is dependent on the agency for a major portion of his income, the Gatekeeper's "total control" of the health care system for enrollees will provide tremendous leverage for the physicians.

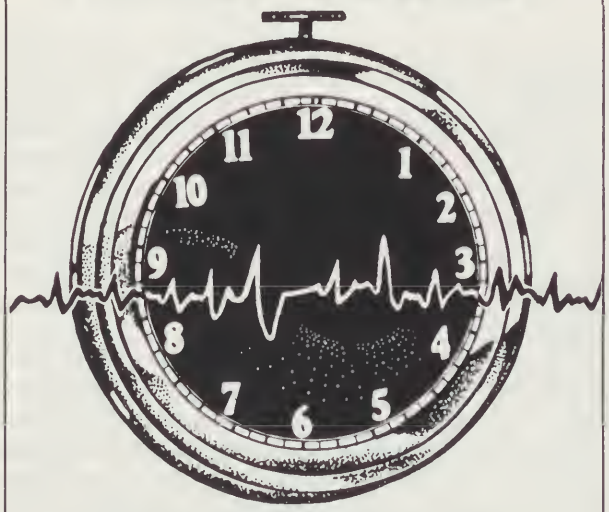
15. *State administrative systems may be inadequate.* Changing from a fee-for-service to a Gatekeeper system will necessitate significant changes for the state to consider. For example, overuse and underuse must be monitored. Enrollment, disenrollment, and grievances are but a few of many additional problems to be considered carefully by the state agency before implementing the PCN.

16. *Physician monitoring.* One state Medicaid medical director has indicated that physician monitoring likely will entail review of the physician's office records.[6] Other states presumably will follow this route.

Discussion

Let there be no question, although quality of care and accessibility are mentioned by advocates, the primary purpose of the Gatekeeper concept is cost containment. Advantages have been listed earlier in this paper. These are immediate concerns, but long-range consequences also must be addressed. Initially, the impact may be cost savings, but access and quality will

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suffer. The PCN physician will undergo increasing scrutiny by bureaucrats to hold costs down. Patients likely will have limited access to specialty care and the technology that has helped produce the world's finest medical care system.

Some have stated that the Gatekeeper/PCN system is akin to the British National Health Service.[7] If, as proposed, the federal government takes over Medicaid in addition to its existing Medicare program, and if the Gatekeeper concept remains in place, we will indeed have taken a major step toward a socialized national health program in the United states.

How should the physician prepare for this rapidly developing concept? Individual physicians and state specialty societies should urge the state medical association to become fully knowledgable about state government activities in Medicaid and PCNs. With its vast resources, the state medical association is indeed in the best position to influence the development of PCN programs. State medical association and physician input and involvement early in the planning process is essential. Typically there will be a committee of physicians from the medical association that will be asked by the state government to assist in developing alternatives to deal with Medicaid costs, including the PCN programs. Pilot programs with careful evaluation over at least one to two years are desirable. These physicians *must* be thoroughly aware of all ramifications of these programs for they are representing all physicians in their states in an area that has far-reaching consequences for patient, physicians, and our medical system.

References

1. Comments to the Health Care Financing Administration on the Interim Final Rule "Medicaid Program; Freedom of Choice: Waivers of and Exceptions to State Plan Requirements." American Society of Internal Medicine, December 30, 1981.
2. United States General Accounting Office. B-208181, July 20, 1982.
3. "A Position Paper: Direct Access to Specialist Care Within Health Maintenance Organizations (HMO's)." American College of Physicians, January 12, 1982.
4. "Medicaid and Primary Care Networks." A Concept Paper and the Proceedings of the NGA Conference on Medicaid and Primary Care Networks/Case Management System. State Medicaid Information Center, Center for Policy Research, National Governors' Association, 444 North Capitol Street, Washington, DC 20001. December 2, 1981.
5. *Professional Liability Guide.* The Massachusetts Medical Society, 22. The Fenway, Boston, Massachusetts 02215.
6. Alsup, P. Address to Saint Mary's Medical Center's Medical Staff. Knoxville, Tennessee. July 20, 1982.
7. "Direct Patient Access to Specialist Care." Transcript of Proceedings. American Academy of Dermatology, April 13, 1981.

Needle Catheter Feeding Jejunostomy: Indications and Complications

JOHN BLEBEA MD

Protein and calorie malnutrition is a common finding among surgical patients, and needle catheter feeding jejunostomy is being used increasingly for postoperative nutritional support to reduce this surgical risk factor. However, the technique is not without complications, the most serious being catheter dislodgement with intraperitoneal infusion and subsequent peritonitis and death.

A review of the literature reveals this complication to occur in 1.4 percent of patients, even when the serosa of the small bowel has been attached to the anterior abdominal wall. We recommend four circumferential nonabsorbable seromuscular sutures attaching the small bowel to the anterior abdominal wall, radiologic confirmation in the recovery room of intraluminal catheter placement, and surgical exploration in cases of inadvertent intraperitoneal infusion of elemental diet.

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Protein and calorie malnutrition is common among surgical patients and leads to increased morbidity.[1-3] This has led to broadening the use of nutritional support perioperatively and, more specifically, the popularization of the needle catheter feeding jejunostomy, as described by Delaney,[4-6] Page,[7-9] and others.[10-14] Their studies support the safety and efficacy of this technique. Significant complications, however, ranging in severity from nausea and vomiting to peritonitis and death, can occur with the use of the needle catheter feeding jejunostomy. Our experience with a patient whose course of enteral feeding was complicated by intraperitoneal infusion and subsequent death prompted us to review the literature concerning the indications and complications of needle catheter feeding jejunostomy.

Indications

Up to half of surgical patients may exhibit signs of moderate to severe protein and calorie malnutrition.[1-2] Patients undergoing major surgery often will have a prolonged period of postoperative negative nitrogen balance that will further exacerbate their poor nutritional status. Studies by Mullen[3] and MacLean[15] have demonstrated a higher morbidity and mortality in such patients. Enteral feeding has become an increasingly popular method of postoperative nutritional support in an effort to reduce the perioperative risk factor of malnutrition.[14,16]

Boles and Zollinger[17] first documented the safety of jejunostomy feeding in 1952. Two years later, McDonald[18] reported on 75 postgastrectomy patients in which a polyethylene catheter feeding jejunostomy was used for postoperative nutritional and fluid therapy. In the early 1960s, a number of clinical studies[19-21] demonstrated that small bowel motility and absorption are not significantly altered following abdominal surgery. The intact small bowel intestinal mucosa could therefore be used in the immediate postoperative period for the absorption of all the required water and electrolytes, as well as for nutritional support. Development of a chemically defined low-residue diet by those working with the space program[22] provided the possibility of complete enteral nutritional therapy through very small caliber feeding catheters.

Delaney *et al.*[5] in 1973 first reported a simple technique in which a sixteen gauge polyvinyl catheter feeding jejunostomy was used safely and successfully in 42 postoperative patients. Reports by others[6-13,23] confirmed the procedure's safety and efficacy. Hoover[14] documented positive nitrogen balance and preservation of body weight and total proteins in patients receiving an elemental diet following extensive upper gastrointestinal operations. Sagar[24] demonstrated less weight loss and shorter hospital stays in patients fed elemental diets. In the only randomized controlled clinical trial, Bastow *et al.*[25] found an improvement not only in anthropometric and plasma protein measurements but also in clinical outcome in postoperative patients fed supplementary tube feedings. Fairfull-Smith and his group[26] also showed significantly smaller nitrogen deficits in those undergoing enteral feedings. The latter have furthermore argued convincingly that nonelemental diets can be tolerated in the great majority of surgical patients. In comparison with elemental enteral diets, they can be used in higher concentration and volume more quickly (and with fewer side effects) because of their lower osmolarity.[13,26,27] They are also considerably less expensive.

Enteral alimentation also has significant advantages over total parenteral nutrition (TPN). It is more physiologic, associated with fewer metabolic complications, and is free from major infectious complications. In addition, it requires no sterilization, needs less nursing care, and is approximately one tenth the total cost of TPN.[7,28]

Postoperative enteral nutrition is selectively indicated in a large number of circumstances where compromised nutritional status exists and a prolonged postoperative course is anticipated. These include: extensive

abdominal operations, esophageal and gastric resection, complicated biliary and duodenal surgery,[29] pancreatectomy,[10] hepatic resection,[13] trauma with multiple injuries,[12] intra-abdominal malignancies where adjunctive radiotherapy and chemotherapy are anticipated,[7,30] and in those patients who are mentally obtunded or require home hyperalimentation.[11,31] Enteral alimentation has been used successfully in those thought to have "compromised bowel," that is, radiation enteritis and short bowel syndrome.[27] Contraindications to enteral alimentation include those patients with small bowel obstruction, intra-abdominal sepsis, extensive retroperitoneal dissection, ascites, and diffuse peritonitis. Intrinsic small bowel disease is a relative contraindication because of the potential for postoperative enterocutaneous fistula development.[11,27-29]

Complications

The most serious complication of needle catheter feeding jejunostomy is intraperitoneal infusion and subsequent death. In our experience, a patient with nonresectable gastric adenocarcinoma had a needle catheter feeding jejunostomy placed following a bypass procedure.[32] This was done according to the revised method of Delaney[4] and included the attachment of the serosa of the small bowel to the anterior abdominal wall using two absorbable sutures of 3-0 braided polyglycolic acid. He was started on enteral feeding on the first postoperative day but was explored on the third postoperative day because of increasing abdominal pain. The feeding catheter was found lying free within the abdomen among a large collection of grey fluid infected with Enterobacter cloacae. He died on the twenty-third postoperative day despite appropriate antibiotic therapy.

Delaney[6] similarly reported three out of 115 patients in whom the catheter became dislodged from the jejunum. Two of these patients had infusion of sterile electrolyte solution without harmful effects. The other patient, however, had infusion of an elemental diet into the peritoneal cavity, requiring operative incision and drainage, and ultimately died. In none of these patients was the serosa of the small bowel attached to the anterior abdominal wall (Table). Page[8,9] also encountered two out of 35 such cases that were managed expectantly with antibiotics and did not require re-exploration. Peristalsis may carry the bowel away from the abdominal wall, while the catheter remains fixed to the skin, leading to intraperitoneal infusion of enteral formula. For this reason Delaney[6] and Page[9] later recommended suturing the bowel serosa to the anterior abdominal wall, a procedure now routinely followed. This, however, as demonstrated in our patient, does not seem to have completely solved the problem.

Yeung,[10] in one out of 43 patients, found the catheter outside the jejunum on routine postoperative contrast

Table. Intraperitoneal Infusion as a Complication of Needle Catheter Feeding Jejunostomy

Author	Rate of Complications	Infusate	Treatment	Result
Delaney[6]*	3/115	1—Elemental Diet 2—Electrolyte Soln	Drainage Monitoring	Death No morbidity
Page[8]*	2/35	Elemental Diet	Antibiotics	Improved
Page[7]	2/199	Contrast Media	Operative Repositioning	Improved
Yeung[10]	1/43	Contrast Media	Catheter Withdrawn	No morbidity
Bongiorno[11]	1/193	Elemental Diet	Unknown	Unknown
Schattenkerk[13]	4/210	Elemental Diet	Re-exploration	One death
Others [14] [23, 30, 33]	0/162	N/A	N/A	N/A
Total	13/957 [1.4%]			

* —Catheter not secured to anterior abdominal wall
N/A—Not applicable

instillation, and the catheter was withdrawn without ill effects. Page[7] reported similar findings in the recovery room, in two of 199 patients. They were immediately returned to the operating room where the catheters were repositioned. Bongiorno[11] reported one case of intraperitoneal infusion in 193 patients. Schattenkerk[13] had four of 210 patients with intraperitoneal leakage, with one death. Hoover,[14] in a smaller series of 26 patients, and Feldtman,[23] recently reviewing his experience in a community hospital, reported no such complications. No instances of intraperitoneal infusion were reported in the series of Norwood[33] or Ballon,[30] with 35 and 40 patients, respectively. These series together record only 13 instances of intraperitoneal infusion out of 957 reported cases, a 1.4 percent incidence. Anecdotal reports imply that the actual incidence may be higher than this, however. As reported in our patient, two seromuscular sutures attaching the jejunum to the abdominal wall may not be sufficient, and we now employ four circumferential sutures.

Other less serious complications include nausea, vomiting, diarrhea, ileus, subcutaneous abscess, pneumatosis intestinalis, acute abdominal pain, small bowel obstruction, internal herniation, volvulus, obstructed catheter, loss of the catheter in the abdominal cavity, difficulty in the extraction of the catheter, and dislodgement of the catheter.[10,12,34,35]

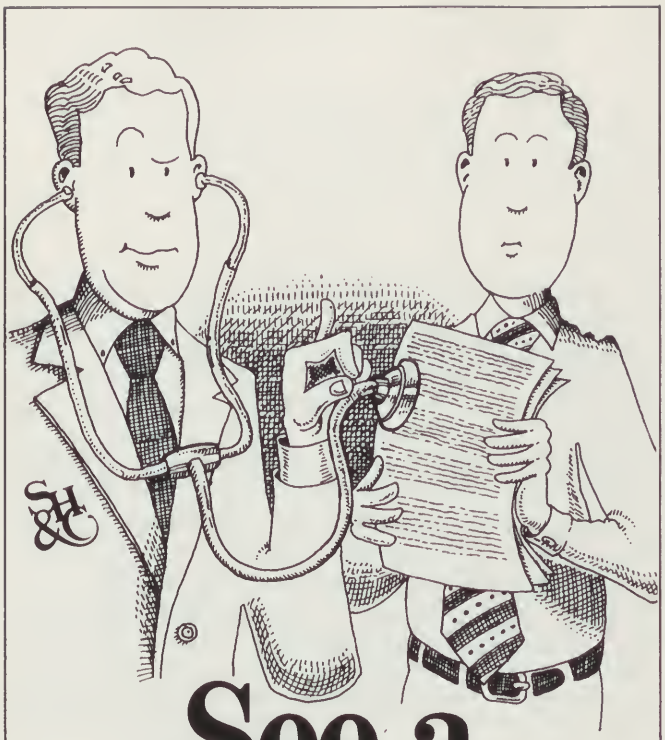
Recommendations

Sterile water-soluble contrast material should be injected via the jejunostomy catheter, either immediately postoperatively in the recovery room or just before beginning any infusions.[7–10] This will document the intraluminal position of the catheter. Suspected late dislodgement of the catheter can be identified in a similar manner.

Needle catheter feeding jejunostomy is a simple and useful technique for postoperative nutritional support in selected surgical patients. Serious complications, such as intraperitoneal infusion with subsequent death, do occur. We recommend four nonabsorbable seromuscular sutures attaching the small bowel to the anterior abdominal wall in a circumferential fashion around the catheter exit site. Radiologic confirmation with water-soluble contrast material should be done in the recovery room, or at least before infusion of any solution through the catheter. Nonelemental diets can be used in the majority of patients. Patients with intra-abdominal infusion of enteral formula should be explored immediately while those with sterile electrolyte infusion may not require immediate re-exploration, but should be monitored carefully.

References

1. Bistrian, B.R.; Blackburn, G.L.; Hallowell, E.; *et al.* "Protein Status of General Surgical Patients." *JAMA* 230(1974):858–60.
2. Hill, G.L.; Pickford, I.; Young, G.A.; *et al.* "Malnutrition in Surgical Patients: An Unrecognized Problem." *Lancet* 1(1977):689–92.
3. Mullen, J.L.; Gertner, M.H.; Buzby, G.P.; *et al.* "Implications of Malnutrition in the Surgical Patient." *Arch Surg* 114(1979):121–25.
4. Delaney, H.M. "An Improved Technique for Needle Catheter Jejunostomy." *Arch Surg* 115(1980):1235–37.
5. Delaney, H.M.; Carnevale, N.J.; and Garvey, J.W. "Jejunostomy by a Needle Catheter Technique." *Surg* 73(1973):786–90.
6. Delaney, H.M.; Carnevale, N.J.; Garvey, G.W.; *et al.* "Postoperative Nutritional Support Using Needle Catheter Feeding Jejunostomy." *Ann Surg* 186(1977):165–70.
7. Page, C.P.; Carlton, P.K.; Andrassy, R.J.; *et al.* "Safe, Cost-effective Postoperative Nutrition: Defined Formula Diet via Needle Catheter Jejunostomy." *Am J Surg* 138(1979):939–45.
8. Page, C.P.; Ryan, J.A.; and Haff, R.C. "Continual Catheter Administration of an Elemental Diet." *Surg Gynecol Obstet* 142(1976):184–88.
9. Page, C.P. "Needle Catheter Jejunostomy." *Arch Surg* 116(1981):729.
10. Yeung, C.K.; Young, G.A.; Hackett, A.F.; *et al.* "Fine Needle Catheter Jejunostomy—An Assessment of a New Method of Nutritional Support after Major Gastrointestinal Surgery." *Br J Surg* 66(1979):727–32.
11. Bongiorno, F.P. "The Needle Catheter Jejunostomy: Present Indications, Future Use." *Surg Rounds* 5(1982):52–61.
12. Moore, E.E.; Dunn, E.L.; and Jones, T.N. "Immediate Jejunostomy Feeding: Its Use after Major Abdominal Trauma." *Arch Surg* 116(1981):681–84.
13. Schattenkerk, M.E.; Obertop, H.; Bruining, H.A.; *et al.* "Needle Catheter Jejunostomy (NCJ) for Early Postoperative Feeding: Experience in 210 Patients." *Neth J Surg* 35(1983):163–66.
14. Hoover, H.C.; Ryan, J.A.; Anderson, E.J.; *et al.* "Nutritional Benefits of Immediate Postoperative Jejunal Feeding." *Am J Surg* 139(1980):153–59.
15. MacLean, L.D. "Host Resistance in Surgical Patients." *J Trauma* 19(1979):297–304.
16. Mullen, J.L.; Buzby, G.P.; Mathews, D.C.; *et al.* "Reduction of Operative Morbidity and Mortality by Combined Preoperative and Postoperative Nutritional Support." *Ann Surg* 195(1980):604–13.
17. Boles, T. and Zollinger, R.M. "Critical Evaluation of Jejunostomy." *Arch Surg* 65(1952):358–66.
18. MacDonald, H.A. "Intrajejunal Drip in Gastric Surgery." *Lancet* 1(1954):1007.
19. Tinckler, L.F. and Kulke, W. "Postoperative Absorption of Water from the Small Intestine." *Gut* 4(1963):8–12.
20. Glucksman, D.L.; Kasler, M.H.; and Warren, W.D. "Small Intestinal Absorption in the Immediate Postoperative Period." *Surg* 60(1966):1020–25.
21. Nachlas, M.M.; Younis, M.T.; Roda, C.P.; *et al.* "Gastrointestinal Motility Studies as a Guide to Postoperative Management." *Ann Surg* 175(1972):510–22.
22. Winitz, M.; Seedman, D.A.; and Graff, J. "Studies in Metabolic Nutrition Employing Chemically Defined Diets." *Am J Clin Nutr* 23(1970):525–45.
23. Feldtman, R.W. and Archie, J.P. "A Three-Year Experience with Needle Catheter Jejunostomy in a Community Hospital." *Surg Gynecol Obstet* 159(1984):23–26.
24. Sagar, S.; Harland, P.; and Shields, R. "Early Postoperative Feeding with Elemental Diet." *Br J Med* 1(1979):293–95.



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25. Bastow, M.D.; Rawlings, J.; and Allison, S.P. "Benefits of Supplementary Tube Feeding after Fractured Neck of Femur: A Randomised Controlled Trial." *Brit Med J* 287(1983):1589–92.

26. Fairfull-Smith, R.J. and Freeman, J.B. "Immediate Postoperative Enteral Nutrition with a Nonelemental Diet." *J Surg Res* 29(1980):236–39.

27. Fairfull-Smith, R.J.; Abunassar, R.; Freeman, J.B.; *et al.* "Rational Use of Elemental and Nonelemental Diets in Hospitalized Patients." *Ann Surg* 192(1980):600–603.

28. Freeman, J.B. and Fairfull-Smith, R.J. "Current Concepts in Enteral Feeding." *Adv Surg* 16(1983):75–112.

29. Ryan, J.A. and Page, C.P. "Intrajejunal Feeding: Development and Current Status." *JPEN* 8(1984):187–98.

30. Ballon, S.C. "Effective Early Postoperative Nutrition by Defined Formula Diet via Needle-catheter Jejunostomy." *Gynecol Oncol* 14(1982):23–32.

31. Matino, J.J. "Feeding Jejunostomy in Patients with Neurologic Disorders." *Arch Surg* 116(1981):169–71.

32. Blebea, J. and King, T.A. "Intraperitoneal Infusion as a Complication of Needle Catheter Feeding Jejunostomy." *JPEN* 9(1985):758–59.

33. Norwood, S.H.; Patterson, R.; and Andrassy, R.J. "Early Experience with the Needle Catheter Jejunostomy." *Milit Med*

34. Bruining, H.A.; Schattenkerk, M.E.; Obertop, H.; *et al.* "Acute Abdominal Pain Due to Early Postoperative Elemental Feeding by Needle Jejunostomy." *Surg Gynecol Obstet* 157(1983):40–42.

35. Cogbill, T.H.; Wolfson, R.H.; Moore, E.E.; *et al.* "Massive Pneumatosis Intestinalis and Subcutaneous Emphysema: Complication of Needle Catheter Feeding Jejunostomy." *JPEN* 7(1983):171–75.

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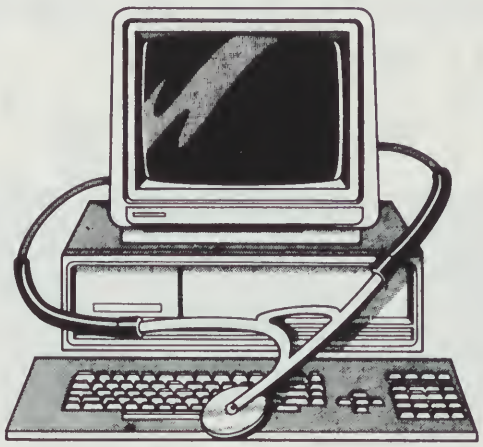
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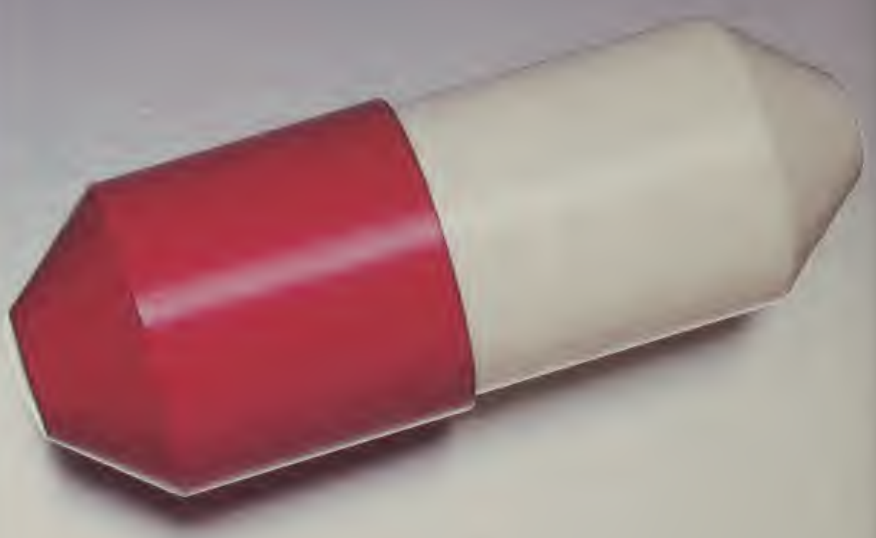
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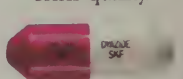
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MIEMSS: Topics of Interest

Distal Pancreatectomy with Splenic Preservation: A Blunt Trauma Patient Report

HORACE F. HENRIQUES MD, CARL A. SODERSTROM MD, MICHAEL D. CRITTENDEN MD, and DAVID R. GENS MD

The authors are affiliated with the Department of Surgery/Traumatology, The Maryland Institute for Emergency Medical Services Systems, University of Maryland, Baltimore, MD. Dr. Henriques is also affiliated with the Department of Surgery, George Washington University, Washington, DC.

Less than 1 percent of patients injured as a result of blunt trauma sustain isolated pancreatic injuries that require surgical intervention. In the majority of instances of pancreatic injury, there are associated intra-abominal injuries. Pancreatic injuries, particularly isolated ones, can pose diagnostic and therapeutic dilemmas. Patients with such injuries may have few signs or symptoms, and commonly available tests to detect these injuries often are insensitive or nonspecific. The mortality rate for pancreatic injuries approaches 20 percent when there are delays in diagnosis and treatment. The timing and type of surgical intervention influence mortality and morbidity rates.

We present a patient whose only significant intra-abdominal injury produced by blunt trauma involved the pancreas and required surgical intervention. The patient report emphasizes the problems of diagnosis of this lesion and considers its surgical management, including indications for attempting splenic salvage.

Patient Report

A 24-year-old male automobile driver was injured when his vehicle struck another at high speed. He was thrown forward against the steering wheel, which impacted his anterior thorax at the level of the costal margins. He was flown directly from the scene of injury to the MIEMSS Shock Trauma Center of the University of Maryland in Baltimore. The patient was normotensive at the crash site, on admission, and throughout his hospital course. He was awake and complained of vague paraumbilical pain and pain bilaterally over the lower thorax, where the contusions were noted. In addition, the patient complained of midline back pain at the level of the costal margins.

Abdominal examination revealed moderate palpable and rebound tenderness and hypoactive bowel sounds. Admitting laboratory data included: hematocrit, 48 percent; leukocyte count, 13,000/cu mm; and serum amylase, 220 IU (normal ≤ 220 IU). The repeat hematocrit one hour after admission was 37 percent. A diagnostic peritoneal lavage was performed using the semi-open paraumbilical method described by Cox and Dunham[1] from our Center. The lavage fluid had an erythrocyte count of 440,000/cu mm and a leukocyte count of 800/cu mm. (In light of the pathology subsequently found, a postoperative amylase determination was performed on the remaining lavage fluid, revealing an activity of 787 IU.)

These findings prompted a laparotomy that included a Kocher maneuver to delineate the duodenum, the head of the pancreas, and the common bile duct. A nonbleeding transverse mesocolic tear and a complete transection of the pancreas at the level of the inferior mesenteric vein were found (Figure 1). The pancreatic injury was diagnosed when a small hematoma over the pancreas, discovered during exploration of the lesser sac, was investigated. Distal pancreatectomy with splenic preservation was accomplished by dissecting the pancreas from the underlying splenic vessels and the spleen (Figure 2, next page). Despite debridement and careful inspection, the pancreatic duct could not be identified in the remaining proximal segment. The proximal pancreatic stump was oversewn with several horizontal mattress sutures that approximated the capsule of the organ. Both passive and active drains were placed in the pancreatic bed through left lateral flank sites.

Serum and urinary amylases returned to normal on the third and fifth day, respectively. Drain removal began on the seventh postoperative day and was completed one week later. The patient returned home on the eighteenth day after injury. Five weeks later, the patient returned to work.

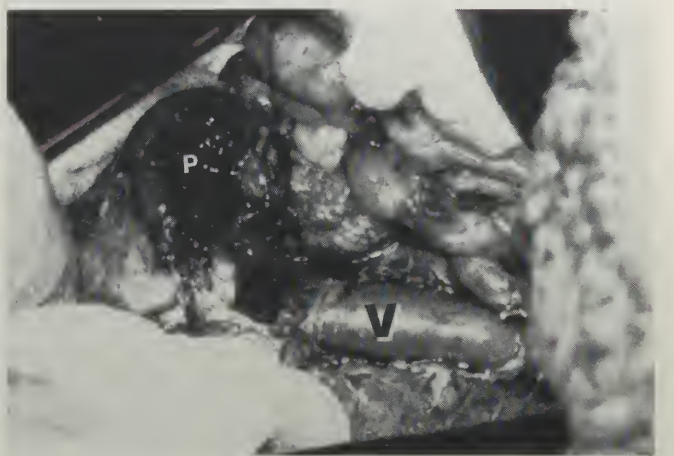


Figure 1. Proximal pancreatic stump (p) prior to debridement. V indicates splenic vein.

The Maryland Institute for Emergency Medical Services Systems (MIEMSS) is the state agency providing emergency patient care in the prehospital environment and in trauma and other specialty referral centers throughout Maryland. Clinicians are invited to submit manuscripts concerning emergency, trauma, and critical care medicine. Send manuscripts to Carl A. Soderstrom MD, Topics Editor, MIEMSS, 22 South Greene St., Baltimore, MD 21201.



Figure 2. Empty pancreatic bed revealing the tortuous splenic artery and the splenic vein (v).

Discussion

While a mortality rate from pancreatic injury of 1 percent has been reported,[2] it more commonly approximates 10 percent in patients who either are not in shock at the time of admission or can be resuscitated promptly. Higher mortality and morbidity rates of 20 to 30 percent, respectively, are noted in patients with multiple associated injuries or in those in whom detection of pancreatic injury is delayed.[3] Mortality, which is highest in the perioperative period, is due to associated injuries, particularly hemorrhage from vessels in proximity to the pancreas,[4] including the vena cava and mesenteric, splenic, and portal veins.

As noted, the early detection of pancreatic injuries is associated with a decrease in morbidity and mortality. Unfortunately, there are few classic signs and symptoms, early or late, associated with pancreatic trauma. Fortunately, the overwhelming majority of pancreatic injuries occur in conjunction with other intra-abdominal injuries that produce findings which prompt laparotomy. These findings include peritoneal signs and symptoms, including a distending abdomen, the roentgenographic demonstration of free-air, and, most commonly, a bloody peritoneal lavage.

In the absence of other findings, an elevated serum amylase level obtained immediately after admission is not an indication to explore the abdomen.[5] However, hyperamylasemia and/or abdominal pain and tenderness (particularly located in midepigastrium) that persist for 24 hours are suggestive of a significant intra-abdominal injury, including one involving the pancreas. Persistent hyperamylasemia and abdominal findings should prompt other diagnostic maneuvers such as relavage, CT scan of the abdomen, or exploratory laparotomy. The clinical index of suspicion should be raised further if there is a history of a direct blow to the upper midabdominal region. This type of trauma can crush the pancreas against the underlying vertebral column, causing an injury that requires surgical correction.

Peritoneal lavage usually will not detect injury to retroperitoneal structures,[6] particularly if there is no associated intra-abdominal injury. Lavage amylase determinations are of little value in detecting pancreatic injury.[5] From 1978 to 1982, only two patients among 870 (0.2 percent) undergoing surgery for blunt abdominal trauma at our Center had pancreatic injuries that required surgical intervention.[7] One injury, which was isolated, consisted of a laceration of the pancreas with transection of the pancreatic duct, which defied detection by peritoneal lavage. The lavage fluid in that patient had an erythrocyte count of 4,700/cu mm, and there was no measurable amylase activity.[6] Based on our institutional experience and that of others,[8] which attest to the limited value of lavage amylase determinations in the acute setting, we no longer routinely perform amylase determinations on admitting lavage samples.

Because only sporadic reports and small clinical series of patients are available, the role of various imaging techniques to diagnose pancreatic injury is not clearly defined.[9,10] Plain abdominal roentgenograms (supine and erect) are of limited value for diagnosing most intra-abdominal injuries, including those involving the pancreas. Such roentgenograms are not obtained routinely at our Center in patients sustaining blunt abdominal trauma. Upper intestinal contrast studies may identify a mass effect, particularly those involving the duodenum. However, these findings may not be manifest in the acute setting. Accumulating clinical reports point to the value of CT scanning in detecting injury to retroperitoneal structures, including the pancreas.[3,10] Endoscopic retrograde pancreatography is another technique that has proved of value in detecting pancreatic injury with duct disruption.[6,9] The choice of test(s) to diagnose a possible pancreatic injury will be dictated by patient status and the ability to adequately monitor and treat the patient during the test(s).

External drainage should be employed in all cases of pancreatic injuries that require debridement and/or resection and when there is extensive contusive injury.[2] The authors prefer to use both active and passive drains, as advocated by Anderson and colleagues.[11] While a number of complex procedures have been described to preserve the distal pancreatic segment, injuries of the body and tail of the pancreas are best and most simply treated by distal pancreatectomy and drainage.[2,4,12] Meticulous debridement and oversewing of the proximal stump with through-and-through mattress sutures approximating the capsule are integral components of this procedure. Ideally, the pancreatic duct should be identified and suture ligated with nonabsorbable material. However, a protracted exploration to identify this structure is not necessary because suturing of the proximal gland usually will occlude the duct. Fistula formation is kept to a minimum by early debridement and oversewing of the proximal stump. The incidence of this complication increases when there are delays in treatment.[4,12] The rarer complication of a chronic fistula occurs if the proximal pancreatic duct is not patent.[12]

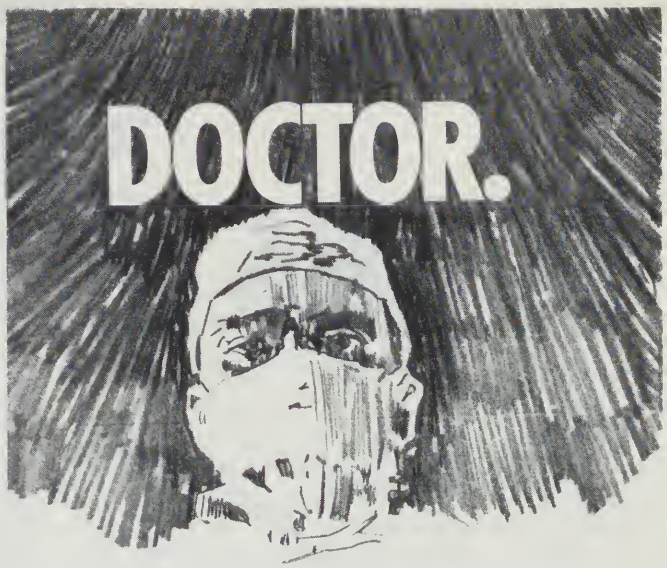
Splenic salvage in trauma victims is predicated on a growing body of evidence that such a maneuver will

prevent the overwhelming septic syndrome associated with the removal of an injured but otherwise normal spleen.[4,12] The host's immune defense system is compromised by removal of the spleen. The spleen, whose protective role in that system is of greatest functional importance in children, remains active throughout life. The 1 percent incidence of asplenic sepsis in the posttraumatic adult population represents a sixtyfold increase over those with intact spleens.[13] With splenic salvage, this complication can be obviated.

Splenic preservation can be accomplished with distal pancreatectomy in the acute setting without significantly increasing blood loss, operating time, or morbidity. It is important to gain control of the splenic vessels early during the procedure. This maneuver helps minimize blood loss and facilitates terminating the procedure if the patient's condition deteriorates. Patient selection criteria for splenic preservation include hemodynamic stability, the absence of intra-abdominal injuries that require extensive surgery, the absence of extra-abdominal injuries that require emergency surgery, and the absence of life-threatening conditions. While children would benefit most from splenic salvage, age alone should not preclude performing the procedure.

References

1. Cox, E.F. and Dunham, C.M. "A Safe Technique for Diagnostic Peritoneal Lavage." *J Trauma* 23(1983):152–54.
2. Graham, J.M.; Mattox, K.L.; and Jordan, G.L., Jr. "Traumatic Injuries of the Pancreas." *Am J Surg* 136(1978):744–48.
3. Jeffrey, R.B., Jr.; Federle, M.P.; and Grass, R.A. "Computed Tomography of Pancreatic Trauma." *Radiology* 147(1983):491–94.
4. Stone, H.H.; Fabian, T.C.; Satiani, M.B.; and Turklesen, M.L. "Experience in the Management of Pancreatic Trauma." *J Trauma* 21(1981):257–62.
5. Moretz, J. A. III; Campbell, D.P.; Parker, D.E.; and William, G.R. "Significance of Serum Amylase Level in Evaluating Pancreatic Trauma." *Am J Surg* 130(1975):739–41.
6. Soderstrom, C.A. "Peritoneal Lavage: The Single Best Diagnostic Tool for Blunt Abdominal Trauma." *Clin Emerg Med* 6(1985):67–80.
7. Cox, E.F. "Blunt Abdominal Trauma: A 5-Year Analysis of 870 Patients Requiring Celiotomy." *Ann Surg* 199(1984):467–74.
8. Alyono, D. and Perry, J.F., Jr. "Value of Quantitative Cell Count and Amylase Activity of Peritoneal Lavage Fluid." *J Trauma* 21(1981):345–48.
9. Taxier, M.; Sivak, M.V., Jr.; Cooperman, A.M.; and Sullivan, B.H., Jr. "Endoscopic Retrograde Pancreatography in the Evaluation of Trauma of the Pancreas." *Surg Gynecol Obstet* 150(1980):65–68.
10. Jones, T.K.; Walsh, J.W.; and Maull, K.I. "Diagnostic Imaging in Blunt Trauma of the Abdomen." *Surg Gynecol Obstet* 157(1983):389–98.
11. Anderson, C.B.; Conners, J.P.; Mejia, D.C.; *et al.* "Drainage Methods in the Treatment of Pancreatic Injuries." *Surg Gynecol Obstet* 138(1974):587–90.
12. Fitzgibbons, T.J.; Yellin, A.E.; Maruyana, M.M.; and Donovan, A.J. "Management of the Transected Pancreas Following Distal Pancreatectomy." *Surg Gynecol Obstet* 154(1982):225–31.
13. Cooper, M.J. and Williamson, R.C.N. "Splenectomy: Indications, Hazards and Alternatives." *Br J Surg* 71(1984):173–80.



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Discipline Commission Action

In the Matter of
Thomas T. Chen MD
Before the
Commission on Medical Discipline

Findings of Fact
Conclusion of Law and Order

Certain information having come to the attention of the Commission on Medical Discipline of Maryland (the "Commission"), the Commission, pursuant to Health Occupations Article, §14-501 requested that the Peer Review Committee of the Medical and Chirurgical Faculty of Maryland ("Med-Chi") review the complaint received against Thomas T. Chen MD (the Respondent). Following a review and report by Med-Chi the Commission determined to charge Respondent with a violation of §14-504(22) of the Act.

In particular the Commission charged that the Respondent had been disciplined by a licensing or disciplinary authority for an act that would be grounds for disciplinary action under §14-504(4) of this section, professional incompetence.

Notice of the charge and the allegations supporting the charge were given to Respondent by letter dated April 26, 1983. A certified receipt indicated that Respondent received the charge letter on May 13, 1983. A prehearing conference by conference telephone call was scheduled for June 21, 1983 but was later rescheduled to August 2, 1983 since Respondent was unavailable for the prehearing conference on the 21st.

At the prehearing conference held by telephone was Respondent; Respondent's attorney, William J. Cossette, Esquire; Barbara Hull Foster, Assistant Attorney General, Administrative Prosecutor; Karl F. Mech MD, Executive Secretary for the Commission; and Ronald S. Gass, Assistant Attorney General, Counsel to the Commission. Following the discussions at the prehearing conference the Respondent agreed to enter into a Consent Order as proposed by the Commission.

Findings of Fact

1. On June 23, 1982, the Division of Medical Quality, Board of Medical Quality Assurance of the State of California, Department of Consumer Affairs (the "California Board") revoked Respondent's Certificate No. C-23674 to practice medicine in the State of California. This decision became effective on July 23, 1982;

2. The California Board immediately stayed the revocation for a period of five (5) years subject to certain conditions of probation as set forth in the Proposed Decision adopted by the California Board (attached hereto as Exhibit A).

3. Pursuant to the Proposed Decision adopted by the California Board on June 23, 1982, the California Board found as findings of fact that:

a. Respondent has committed acts of gross negligence and was therefore subject to disciplinary action pursuant to California Law.
b. More specifically, on January 21, 1975, Respondent performed a cholecystectomy on patient E.M. at Oak Park Community Hospital in Stockton. Respondent treated, diagnosed, and cared for the patient in a grossly negligent manner, and failed to recognize and adequately and sufficiently treat said patient's postoperative intra-abdominal bleeding, which led to said patient's death due to exsanguination of the cholecystectomy site.
c. Respondent's conduct evidenced incompetence.

Conclusions of Law

Based on the foregoing Findings of Fact, the Commission concludes as a matter of law;

1. That Respondent's certificate to practice medicine in California was revoked by the Division of Medical Quality, Board of Medical Quality Assurance, Consumer Division of the State of California;

2. That the actions of Respondent that resulted in the revocation of his California certificate, if committed in Maryland, would be a violation of Section 14-504(4).

Accordingly, the Commission adjudicates Respondent GUILTY of violating §14-504(22) of the Health Occupations Article of Maryland Annotated Code.

Order

Upon the foregoing Findings of Fact and Conclusions of Law, it is this 3rd day of December 1985, by a unanimous vote of those members of the Commission on Medical Discipline of Maryland who considered this case,

ORDERED that Respondent's license to practice medicine in the State of Maryland, heretofore issued to the Respondent is hereby REVOKED; and be it further

ORDERED that the foregoing Revocation shall be immediately STAYED, with Respondent placed on PROBATION upon the following conditions:

1. That Respondent shall comply with the conditions of probation set forth in the Committee's Proposed Decision Order, Numbers 1 through 7 and adopted by the June 23, 1982 Decision of the Division of Medical Quality, Board of Medical Quality Assurance, Division of Consumer Affairs, State of California;

2. That if Respondent should come to Maryland to practice medicine, he shall immediately notify the Commission on Medical Discipline;

3. That if Respondent comes to Maryland he shall submit his practice to quarterly reviews by a committee approved by the Commission and he shall arrange for the committee to submit reports to the Commission summarizing the result of the review of his practice;

4. That the reports required under Paragraph 3 must indicate that Respondent is practicing competently; and

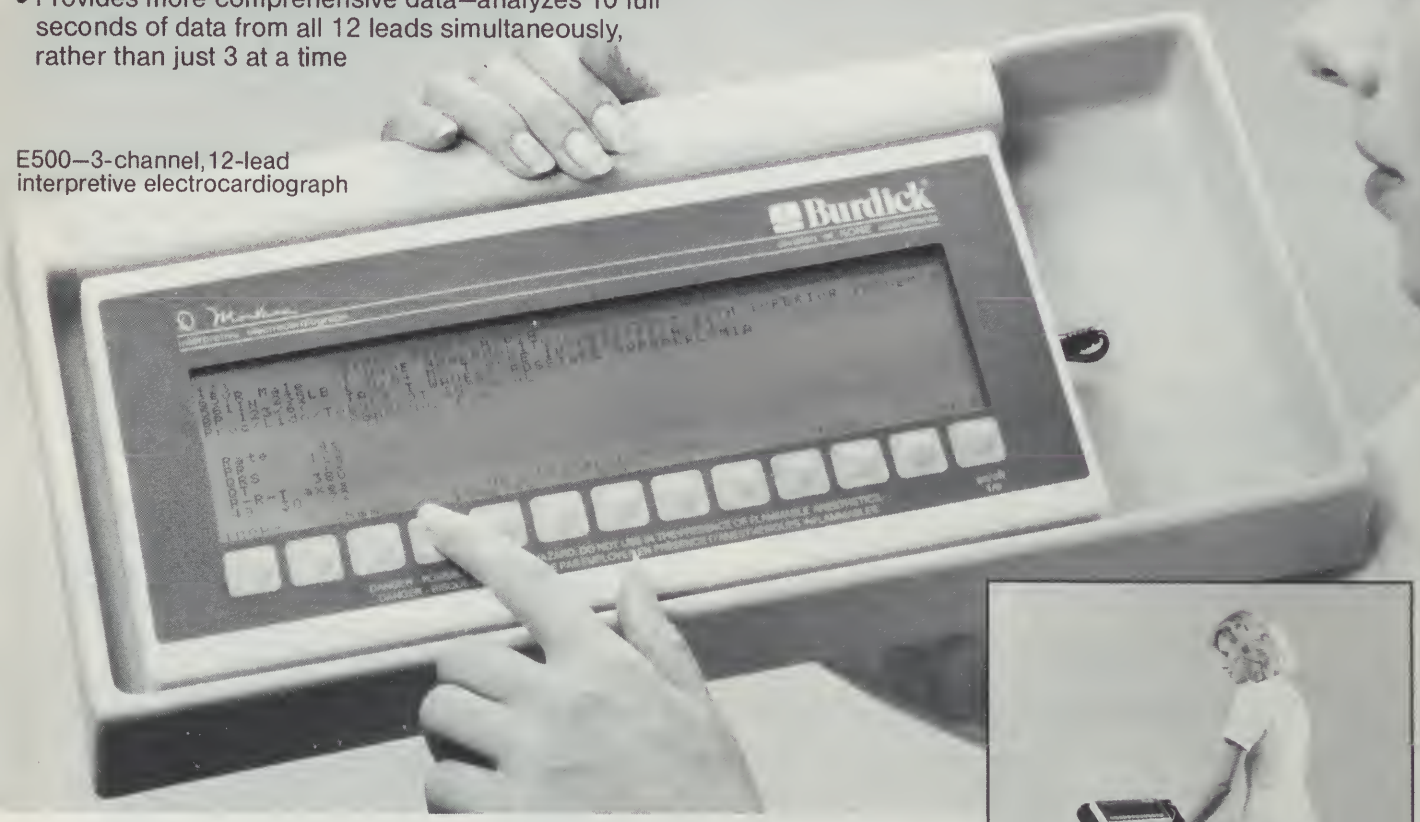
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5. That Respondent must practice in accordance with the laws in effect for the State of Maryland; and be it further

ORDERED that if the Respondent violates any of the foregoing conditions of probation, the Commission, after notification and a hearing may discontinue the Respondent's probation and impose any disciplinary sanctions it deems appropriate; and be it further

ORDERED that upon successful completion of Respondent's conditions of probation and a full restoration of his certificate to practice medicine in California without restriction, the Commission will entertain a petition for termination of Respondent's probationary status. At such time if the Commission determines that termination of probation is not appropriate, the Commission may alternatively modify one or more of the conditions upon which the Respondent was placed on probation.

HILARY T. O'HERLIHY, **MD, Chairman**
Commission on Medical Discipline of Maryland

Consent

By this Consent, I hereby consent and submit to the foregoing Order and its conditions. I do not admit the truth of the charges, but I acknowledge the validity of the Order as if made after a hearing in which I would have had the right to counsel, to confront witnesses, to give testimony and to call witnesses on my own behalf and to all other substantive and procedural protections provided by law. I also recognize that I am waiving my rights to appeal any adverse ruling of the Commission that might have followed any such hearing. By this consent, I waive all such rights and acknowledge that by my failure to abide by the conditions set forth in this Order, I may suffer disciplinary action against my license to practice medicine in the State of Maryland.

THOMAS T. CHEN **MD**

• • •

In the Matter of Dwight L. Foster MD Before the Commission on Medical Discipline

Consent Order

Based upon information coming to its attention, the Commission on Medical Discipline (the "Commission") after investigation determined to charge Dwight L. Foster MD (the "Respondent") with violations of the Maryland Medical Practice Act (the "Act"), Maryland Health Occupations Article, §14-101 *et seq.* Specifically, by letter dated October 11, 1983, Respondent was charged with a violation of §14-504(22) of the Act as follows:

(4) Is professionally incompetent.

A prehearing conference was scheduled for November 1, 1983, at 12:30 p.m. However, rather than having a prehearing conference the administrative prosecutor, Barbara Hull Foster, Assistant Attorney General and the Respondent discussed settling this case. As a result of their negotiations, Respondent agreed to enter into the following Consent Order, thereby disposing of the matter without a hearing.

Findings of Fact

Based on the information in its file and otherwise known and available to it, the Commission finds that:

1. The Respondent at all times relevant to the proceedings was an individual licensed to practice medicine in Maryland and is currently licensed to practice medicine in Maryland;

2. On December 16, 1980, Respondent's license to practice medicine in Canada was revoked by the Disciplinary Committee ("the Committee") of the College of Physicians and Surgeons of Ontario. See decision attached hereto;

3. The revocation issued by the Committee related to conduct which formed a basis for disciplinary action under §14-504(4) of the Act; and

4. Specifically the charges before the Commission were that Respondent's conduct in treating K.S. evidenced incompetence in that he showed a lack of knowledge, skill, and judgment and disregarded the welfare of his patient. The Committee found that the Respondent attempted to perform an abortion on this 17-year-old female in her home during the fifth month of her pregnancy. He did not take a history or make a functional inquiry. He did perform a proper physical examination. He did not perform laboratory tests or have laboratory tests performed. He performed the abortion with no resuscitative equipment present. After the abortion he was informed the patient was ill with pain and fever. He took no action. He did not visit the patient nor did he refer her to a hospital. Subsequently, the patient developed suppurative pertitonitis from a perforated uterus. She went into septic shock and became critically ill. Because of the complications of illness it was necessary to remove her uterus, fallopian tubes, and ovaries, leaving her sterile. Finally the patient had post complications that necessitated prolonged stay in the respiratory unit of another hospital.

Conclusion of Law

Based on the foregoing Findings of Fact, the Commission on Medical Discipline, by a unanimous vote of those members considering the above case, hereby concludes as a matter of law that Respondent has violated §14-504(22) of the Maryland Medical Practice Act.

Order

Based on the foregoing Findings of Fact and Conclu-

sion of Law, it is this 3rd day of December 1985, by a unanimous vote of those members of the Commission on Medical Discipline considering the above case

ORDERED that the Maryland license to practice medicine of Respondent, Dwight L. Foster MD, be hereby SUSPENDED, and be it further

ORDERED that if Respondent comes to Maryland and wishes to practice medicine he may apply to the Commission for a reinstatement of his license to practice medicine.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline of Maryland

Consent

By this Consent, knowingly and voluntarily executed by me, I hereby consent and submit to the foregoing Order and its conditions. I acknowledge the validity of the Order as if made after a hearing at which time I would have had the right to counsel, to confront witnesses, to give testimony, and to call witnesses on my behalf and to all other substantive and procedural protections provided by law. I also recognize that I am waiving my rights to appeal any adverse ruling of the Maryland State Commission on Medical Discipline that might have followed such a hearing. By this Consent, I waive all such rights.

DWIGHT L. FOSTER, MD

• • •

In the Matter of William R. Greco MD Before the Commission on Medical Discipline

Findings of Fact, Conclusions of Law and Order

Based upon certain information coming to the attention of the Commission on Medical Discipline (the "Commission"), the Commission determined to charge William R. Greco MD (the "Respondent") with violation of Section 14-504(6) of the Medical Practice Act, Health Occupations Article, Annotated Code of Maryland.

Appropriate notice of the charges and the grounds from which they arose were given to Respondent by letter dated October 3, 1985. A hearing on the charges was held on December 3, 1985.

Findings of Fact

Based upon the evidence produced at the hearing, the Commission finds that:

1. At all times relevant to this case, Respondent was a physician licensed to practice medicine in the State of Maryland;

2. On March 12, 1984, the respondent was convicted on six counts of Medicaid Fraud by the Circuit Court of Baltimore City, State of Maryland, in violation of Article 27, Section 230C of the Annotated Code of Maryland.

3. That these were convictions of crimes involving moral turpitude.

Conclusions of Law

Based upon the foregoing Findings of Fact, the Commission finds that the Respondent violated Section 14-504(6) of the Medical Practice Act in that he was convicted of a crime involving moral turpitude.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law, it is this 21st day of January 1986, by a majority vote of those members of the Commission hearing this case, hereby

ORDERED that the license of the Respondent, William R. Greco MD, to practice medicine be REVOKED, and it is further

ORDERED that the revocation be STAYED, upon the performance of the following conditions:

1. That the Respondent be placed on probation for a period of six years from the date of this Order; and

2. That the Respondent's practice be subject to review by the Peer Review Committee of the Medical and Chirurgical Faculty of the State of Maryland; and

3. That the Respondent fully comply with the conditions of probation imposed by the Circuit Court for Baltimore City in Case No. 18312601.

ORDERED that upon the expiration of six years from the date of this Order, in the event that the conditions of this Order have not been violated, the Commission shall vacate the revocation, upon a petition by the Respondent, and it is further

ORDERED that in the event that the Commission determines, after notice to the Respondent and an opportunity to be heard, that the Respondent has not complied with the conditions set forth herein, the Commission shall impose the revocation, and may proceed with such additional charges as the Commission deems appropriate.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline of Maryland

• • •

In the Matter of
Moe M. Myint MD
Before the
Commission on Medical Discipline

Findings of Fact,
Conclusions of Law and Order

On October 29, 1985, the Commission ordered the emergency suspension of the Respondent's license to practice medicine by authority of State Government, §10-405. Written notice of the suspension was provided to the Respondent and the Respondent requested a hearing on the emergency suspension. A hearing on the emergency suspension was held on November 27, 1985.

Findings of Fact

Based on the information known and available to it, the Commission finds that:

1. At all times relevant to the case, Resondent was a physician licensed to practice in the State of Maryland.
2. That Respondent does not practice medicine in the State of Maryland.
3. That it is necessary that Respondent retain her license to practice medicine in Maryland in order to qualify for training in Maryland for which she has applied.
4. That because Respondent is not practicing medicine in the State of Maryland, she does not present a risk to public health and safety if she is permitted to continue to retain her license.

Conclusions of Law

Based upon the foregoing Findings of Fact, the Commission finds that although the complaint herein will continue to be prosecuted before the Commission, there is no risk to public health and safety if Respondent is permitted to continue to hold a Maryland license to practice medicine.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law, it is this 7th day of January 1986, by a majority vote of those members of the Commission on Medical Discipline considering this case, hereby

ORDERED that the emergency suspension of the license of the Respondent Moe M. Myint MD to practice medicine shall be terminated and her license shall be RESTORED.

HILARY T. O'HERLIHY, Chairman
Commission on Medical Discipline of Maryland

• • •

In the Matter of
Nathaniel Sharp MD
Before the
Commission on Medical Discipline

Consent Order

Based upon certain information having come to the attention of the Maryland State Commission on Medical Discipline ("the Commission") on August 7, 1984, regarding the medical practice of Nathaniel Sharp MD ("the Respondent"), the Commission requested that the practice of the Respondent be investigated by the Committee on Drugs and Peer Review Committee of the Medical and Chirurgical Faculty of the State of Maryland ("Med-Chi"). After considering the investigative report the Commission determined to charge Respondent with violation of the Maryland Medical Practice Act found in the Health Occupations Article, Annotated Code of Maryland ("the Act"). Specifically the Commission charged that the Respondent violated Section 14-504 of the Act.

Respondent was notified of the charges by letter dated November 13, 1985. A prehearing conference was held on December 17, 1985.

Findings of Fact

The Commission finds that:

1. That at all times Respondent was a physician licensed to practice medicine in Maryland;
2. That on July 16, 17, 19, and 21, 1982, Respondent was employed by Chesapeake Medical, Inc.
3. Respondent prescribed 60 Methaqualone tablets without regard to the medical condition and history of the patient under the direction of B.M., a person not licensed to practice medicine.

Conclusion of Law

Based upon the foregoing Findings of Fact, the Commission determines that there is basis to find that Respondent violated Section 14-504(11) of the Health-Occupations Article in that he promoted the sale of drugs to a patient so as to exploit the patient for financial gain and Section 14-504(19) in that he aided an unauthorized person in the practice of medicine.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law it is this 7th day of January 1986, by a unanimous vote of the quorum of those members of the Maryland Commission on Medical Discipline considering this case:

ORDERED that Respondent Nathaniel Sharp MD be reprimanded for the aforesaid violations and he be strongly admonished not to enter into a contract of employment that will require him to violate the provi-

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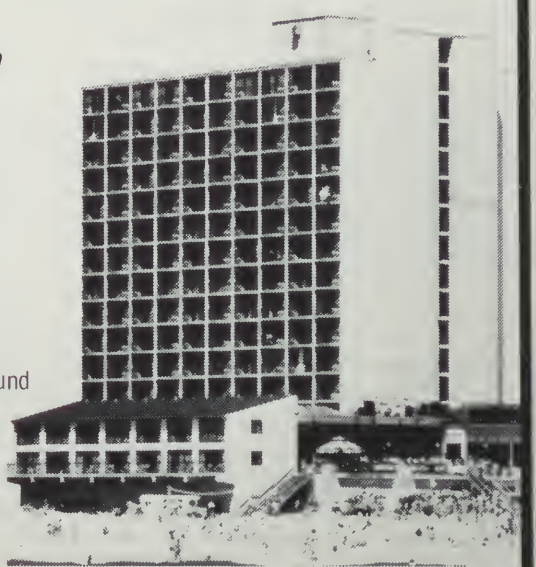
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sions of the Maryland Medical Practice Act.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline of Maryland

Consent

By this Consent, I hereby admit the truth of the Findings of Fact, and accept and submit to the foregoing Consent Order. I acknowledge the validity of the Consent Order as if made after a hearing in which I would have had the right to counsel, to confront witnesses, to give testimony, to call witnesses on my own behalf, and to all other substantive and procedural protections provided by law. I also recognize that I am waiving my right to appeal any adverse ruling of the Commission that might have followed any such hearing. By this consent, I waive all such rights. I sign this Consent Order after an opportunity to consult with counsel, without reservation, and I fully understand its meaning.

NATHANIEL SHARP MD

• • •

In the Matter of Christobal Vela MD Before the Commission on Medical Discipline

Notification of Termination of Probation and Reinstatement of Medical License

By Order dated June 1, 1982 (the "1982 Order") the Commission on Medical Discipline (the "Commission") found Christobal Vela MD (the "Respondent") guilty of pleading nolo contendere to charges of crimes of moral turpitude, pursuant to Maryland Annotated Code, Subsection 14-504(6) of the Health Occupations Article, and revoked the medical license of Respondent subject to certain conditions (the "Conditions of Probation"). The Order further provided that if Respondent complied satisfactorily with the Conditions of Probation the Commission would entertain a petition for termination of Respondent's probationary status and reinstatement of his medical license without any conditions or restrictions. On December 8, 1985 Respondent petitioned the Commission for reinstatement of his license to practice medicine in Maryland without any conditions or restrictions. At its meeting of January 7, 1986 the Commission reviewed Respondent's petition for reinstatement. Based upon its review of the petition, the Commission determined that the Respondent had fulfilled the Conditions of Probation contained in the June 1, 1982 Order.

Findings of Fact

The Commission finds that Respondent has satisfactorily complied with all the Conditions of Probation imposed by the Commission's 1982 Order.

Conclusions of Law

The Commission concludes, as a matter of law, that it is appropriate to terminate Respondent's Conditions of Probation and to reinstate his license without any condition or restriction.

Order

Upon the foregoing Findings of Fact and Conclusions of Law, it is this 7th day of January 1986 by a unanimous vote of a quorum of the Commission:

ORDERED that effective as of the date of this Order, the Conditions of Probation imposed upon Respondent's practice of medicine by the Commission's 1982 Order are hereby TERMINATED and of no further force and effect; and be it further

ORDERED that Respondent's license to practice medicine in the State of Maryland be REINSTATED without any condition or restriction whatsoever.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline of Maryland



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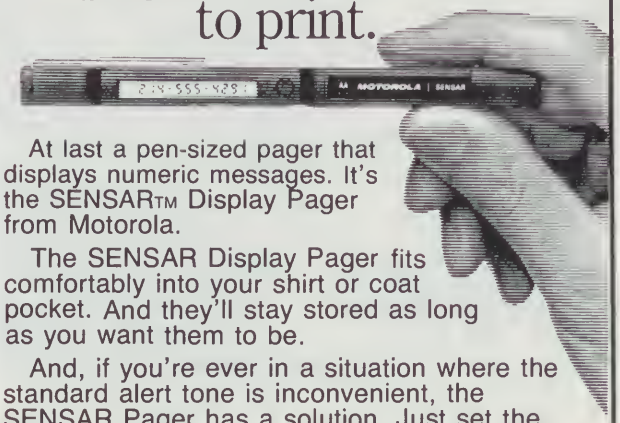
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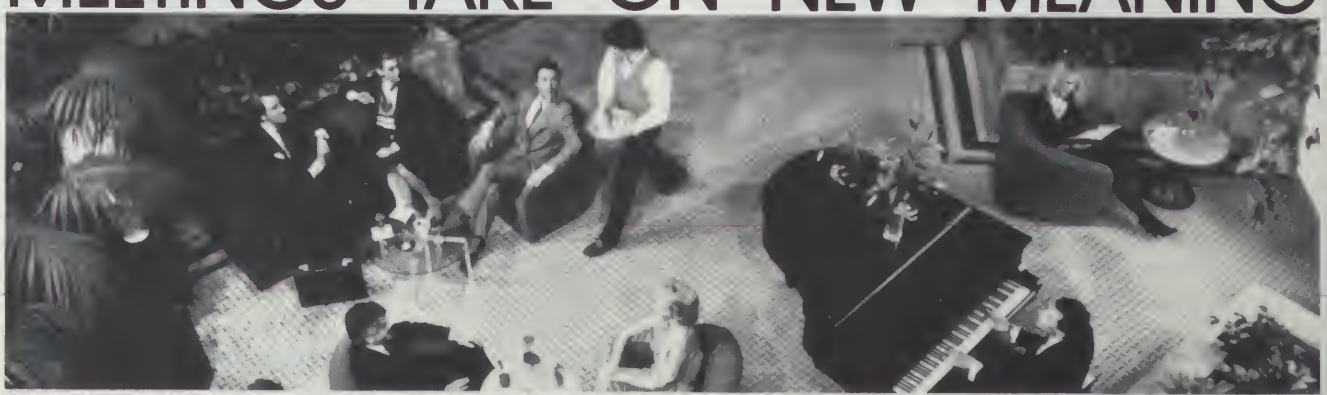
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Doctors Take Note

Miscellaneous Meetings

Apr 25–26 Computer Applications, An Introductory Workshop, College Park, MD, sponsored by the American College of Obstetricians and Gynecologists. Fee: $360 nonfellow. Info: R. Murray 202-638-5577 ext. 343.

Apr 30 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Washington, DC. Info: 312-645-4958.

May 1 Managing the Business Side, conducted by AMA's Department of Practice Management, in Washington, DC. Info: 312-645-4958.

May 4–6 Fifth Region II & III Conference on High Blood Pressure Control: Consensus Amid Controversy. Radisson Wilmington Hotel, Wilmington, DE. Info: Coordinator, HBP Control Program, Delaware Division of Public Health, P.O. Box 637, Dover, DE 19903 (302-736-4651).

May 7 Insurance Processing and Coding, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

May 8 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Pittsburgh, PA., Info: 312-645-4958.

May 9 Marketing Strategies for Private Practice, conducted by AMA's Department of Practice Management, in Pittsburgh, PA. Info: 312-645-4958.

May 15–18 Virginia Society of Otolaryngology—HNS Annual Meeting, Wintergreen Resort, Wintergreen, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

May 27–31 Fifteenth Annual SCCM Educational and Scientific Symposium, Washington, DC. Fee: Nonmember physicians $375, nurses and therapists $270, member physicians $275, nurses and therapists $225; approx 40 Cat I credits. Info: T. Schultz 714-870-5243.

May 29–Jun 1 The Virginia Society of Ophthalmology Annual Meeting, The Omni International, Norfolk, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

Jun 12–13 Principles and Applications of Epidemiology, University of Virginia Medical Center, Charlottesville. Fee: $65. Info: J. Jagger or C. Groah, Box 180, University of Virginia Medical Center, Charlottesville, VA 22908 (804-924-5159 or 924-5668).

Jun 25 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jun 26 Managing the Business Side, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jul 25–27 Eighth Annual Pediatrics at the Beach, presented by the Department of Pediatrics, Children's Medical Center and the Office of Continuing Medical Education at the Medical College of Virginia, will be held at the Cavalier Resort Hotel in Virginia Beach. 12 AMA Cat I credits, 12 AAP PREP credits, 12 AAFP credits, and 1.2 CEU's from the Virginia Commonwealth University. Info: B. Winn, Box 48, MCV Station, Richmond, VA 23298-0001 (804-786-0494).

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The Johns Hopkins Medical Institutions

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985–86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Apr 19 Third Annual Houston Everett Memorial Course in Gynecologic Urology. Fee: physicians $90; residents $75 (with letter verifying status); 8 AMA Cat I credits. Info: J. Ryan 301-955-6046.

Apr 28–30 Interventional Radiology and DSA. Fee $325 physicians; $175 residents, nurses, technologists; 25 AMA Cat I credits; ECE by ASRT. Info: C. Kearney 301-955-3168.

May 2–3 The Developing Heart. Fee: $75. Info: C. Kearney 301-955-6046.

May 1–2 Advances in Head and Neck Surgery. Hours of instruction: 16.

May 6–9 Emergency Medicine. Hours of instruction: 29.

May 12–17 Topics in Clinical Medicine. Hours of instruction: 43.

May 16 Recent Advances in Macular Degeneration (Columbia, MD). Hours of instruction: 8.

May 19 The Use of Insulin Pump Treatment. Fee: $90; 6.5 AMA Cat I credits, 6.5 CEU. Info: C. Sentman 301-955-6046.

May 19–21 Toxicology Update '86. Hours of instruction: 24.

Jun 6–7 Glaucoma '86. Hours of instruction: 10.

Jun 9–11 Toxicology Update '86. Info: J. Corn, The Johns Hopkins School of Hygiene and Public Health, 615 N. Wolfe St., Baltimore, MD 21205 (301-955-2609).

Jun 9–13 Basic Practicum in Diagnostic Ultrasound. Hours of instruction: 40.

Jun 19–20 National Conference on Alcoholism and Cardiovascular Disease.

Jul 10–12 Endoscopic Sinus Surgery, lecture series with practical laboratory sessions. Fee: $550 lab/lecture series; $265 for lectures only; 22 AMA Cat I credits for lab/lecture; 14 AMA Cat I credits for lectures only. Info: C. Kearney 301-955-3168.

Jul 14–18 Control of Biohazards in the Research Laboratory. Info: B. Tepper, Director, Safety & Environmental Health (301-955-5918) or J. Dorn, Director, Continuing Education Program (301-955-2609).

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/

86. Info: J. Mosmiller 301-955-8450.

Basic Practicum May 19–23, Aug 11–15, Sep 22–26, Nov 17–21. Fee: $460; 40 AMA Cat I credits.

Advanced Obstetrics & Gynecology Apr 23–25, Nov 5–7. Fee: $325, 24 AMA Cat I credits.

Visiting Physicians offered weekly throughout the year for experience in the lab and participation in reading sessions. By appointment. Fee: $460; 40 AMA Cat I credits.

Advanced Practicum by Ultrasound Jun 9–13. Fee: $460, 40 AMA Cat I credits.

Continuously throughout the year. One-week Microsurgery Training Course. Basic technique and principles, individualized instruction, and practice sessions. Fee: $1,200; 40 AMA Cat I credits. Info: Prog. Coord. 301-955-3169.

The Johns Hopkins Medical Grand Rounds. Accredited audiovisual subscription program for the practicing physician. 40 AMA Cat I credits/year. Write to the Johns Hopkins University School of Medicine, Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205 (301-955-3988).

Thursdays—Jan 16 through May 1, 4–5 p.m. Reproductive Endocrinology Lecture Series. 1 AMA Cat I credit; Cognate per session, Formal Learning, ACOG. Info: 301-955-3355.

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University of Maryland School of Medicine

CME Courses: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Apr 29 Current Concepts of Infections in Diabetes Mellitis, Baltimore Plaza Hotel. Fee: $15, 6 AMA Cat I credits.

May 8 Maryland Surgical Society Scientific Session, 1–5 p.m. Davidge Hall; Banquet 7 p.m. Info: J. Thompson 301-528-7454.

May 8–10 Alumni Crab Feast, University of Maryland School of Medicine, 7–10 p.m. Students Common, MSTF. Info: J. Thompson 301-528-7454.

May 9 University of Maryland School of Medicine, Dermatological Rounds and Finklestein Lectureship, 1:30 p.m. Info: J. Thompson 301-528-7454.

May 9 Medical Alumni Association Crab Feast, Atrium MSTF, University of Maryland, $10/person. Info: J. Thompson 301-528-7454.

May 10 Medical Alumni Association Complimentary Breakfast 8 a.m. Info: J. Thompson 301-528-7454.

May 10 Scientific Session presented by the Class of 1961 1–4 p.m. Info: J. Thompson 301-528-7454.

May 10 American Psychiatric Association Meeting, Washington, DC. Info: J. Thompson 301-528-7454.

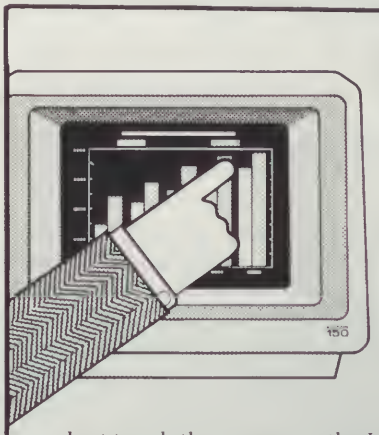
May 10 Alumni Reception and Dinner Dance, at the Sheraton Inner Harbor, University of Maryland School of Medicine, Info: J. Thompson 301-528-7454.

Jun 22–27 12th Annual Family Medicine Review Course. Carousel Hotel, Ocean City. Fee: $350; credits TBA.

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BRIEF SUMMARY

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist).

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LO_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LO_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LO_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

CARDIZEM 30-mg tablets are supplied in bottles of 100 (NOC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NOC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NOC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NOC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other. Issued 4/1/84

See complete Professional Use Information before prescribing.

0642T5

References: 1. *Physicians' Desk Reference®*, ed 39. Oradell, NJ, Medical Economics Company Inc, 1985. **2.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **3.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982; 50(Sept):94-116. **4.** Subramanian VB: Comparative evaluation of four calcium antagonists and propranolol with placebo in patients with chronic stable angina. *Cardiovasc Rev Rep* 1984; 5:91-104. **5.** Schroeder JS, Feldman RL, Giles TO, et al: Multiclinic controlled trial of diltiazem for Prinzmetal's angina. *Am J Med* 1982; 72:227-231. **6.** Weiner DA, McCabe CH, Cutler SS, et al: The efficacy and safety of high-dose verapamil and diltiazem in the long-term treatment of stable exertional angina. *Clin Cardiol* 1985; 7:648-653. **7.** Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. *Consultant* 1984; 24(Dec):150-159.

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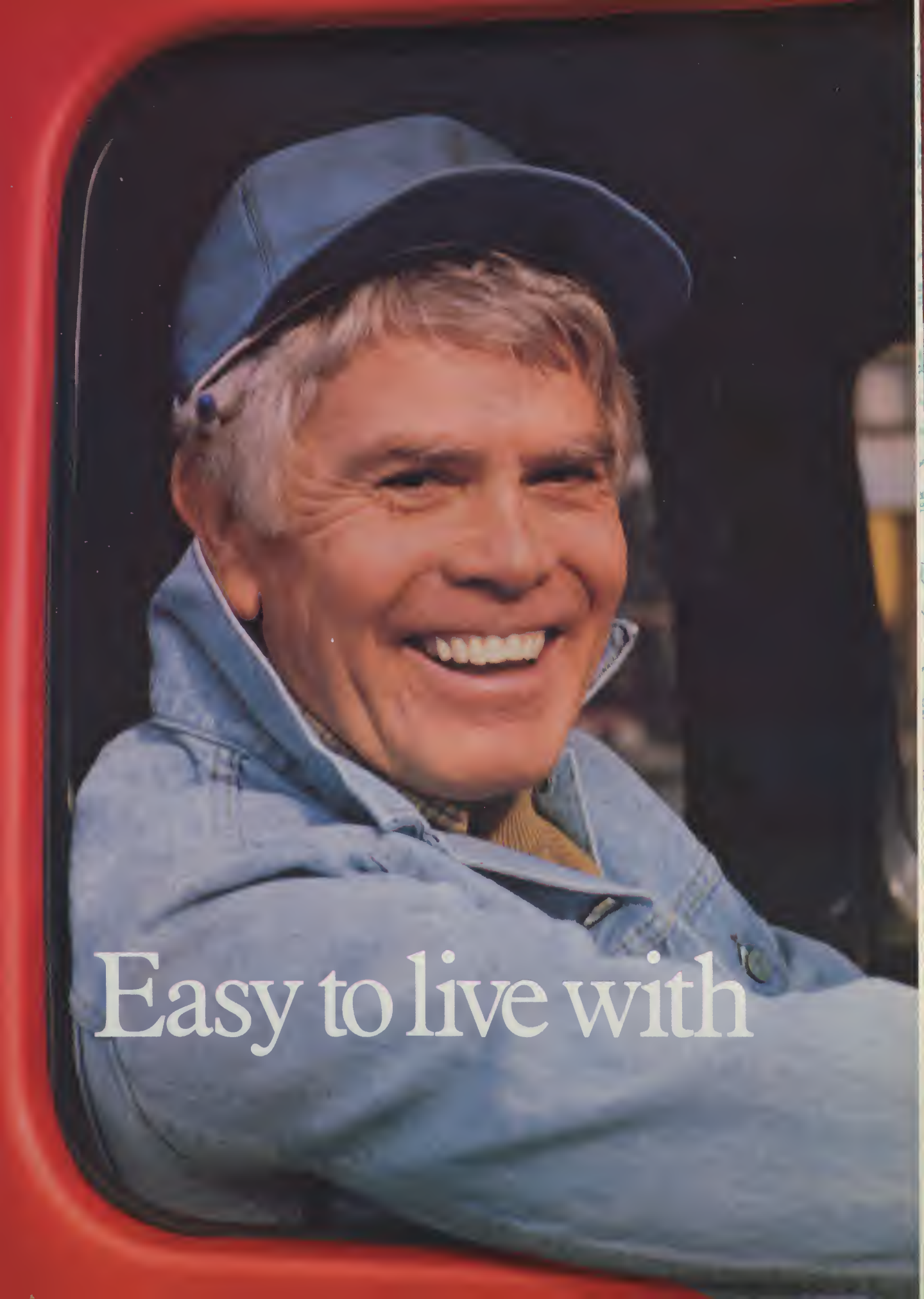


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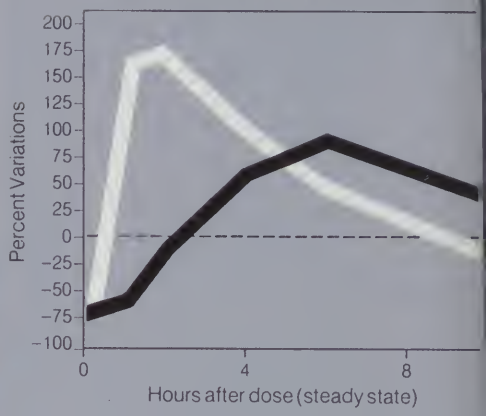
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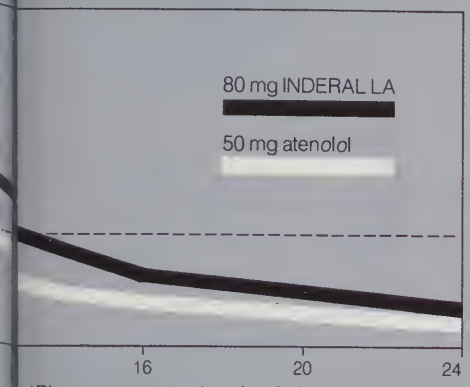
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INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma.

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Please turn page for brief summary of prescribing information.

atenolol over 24 hours*[1]



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80 mg 120 mg 160 mg

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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULARS.)*

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INDERIDE® LA Brand of PROPRANOLOL HYDROCHLORIDE (INDERAL® LA) and HYDROCHLOROTHIAZIDE **(Long Acting Capsules)**

INDERAL LA AND INDERIDE LA Capsules should not be considered simple mg-for-mg substitutes for INDERAL and INDERIDE Tablets. Please see package circulars.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Once-daily INDERIDE® LA

Each capsule contains propranolol HCl (INDERAL® LA), 80 mg, 120 mg, or 160 mg, and hydrochlorothiazide, 50 mg



80/50 120/50 160/50

The appearance of these capsules is a registered trademark of Ayerst Laboratories.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

REFERENCES

1. Data on file, Ayerst Laboratories. **2.** Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321-1323. **3.** Sumiye L, Vivian AS, Frisof KB, et al: Potassium loss associated with hydrochlorothiazide versus chlorthalidone. *Clin Ther* 1981;4:308-320. **4.** Ram CVS, Garrett BN, Kaplan NM: Moderate sodium restriction and various diuretics in the treatment of hypertension. *Arch Intern Med* 1981;141:1015-1019.

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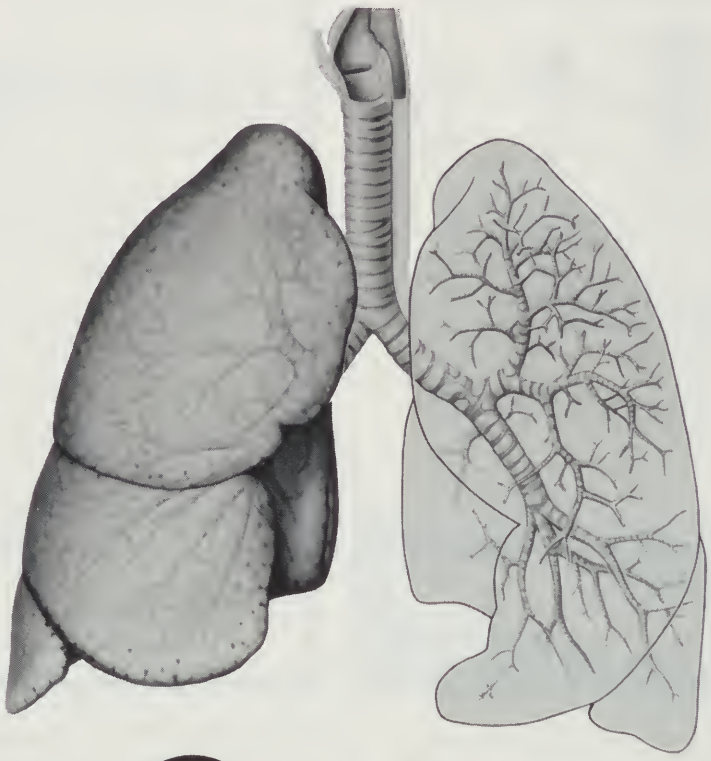
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offers effectiveness against the major causes of bacterial bronchitis

H. influenzae, *H. influenzae*, *S. pneumoniae*, *S. pyogenes*
(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

Note: Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Manuscripts must be original typed copy, double-spaced throughout (including text, case reports, legends, tables, and references) with margins of at least one inch. Number pages consecutively. Please submit two additional copies.

Include in the manuscript the concise title, full name of the author (or authors) with highest degree, academic and professional titles, affiliations, and any institutional or other credits.

An introductory synopsis/abstract of approximately 100–150 words is required.

Tables are to be typed on separate sheets ot paper, numbered, and have a brief descriptive title. The Editor reserves the right to edit tables. Be sure that statistics are consistent in both tables and text.

References are limited to those citations noted in the text. References are to be typed double-spaced and numbered consecutively as they appear in text. They will be examined critically at the time of review and must be kept to a minimum. The number of references is generally limited to 20 in major contributions and fewer in shorter articles. Exceptions may be made if appropriate in the opinion of the reviewing editor. Personal communications and unpublished data should not be included. The following are necessary: names of all authors, complete title of article cited (lower case), name of journal abbreviated according to *Index Medicus*, volume number, first and last page numbers, and year of publication. For more extenisve information about preparing medical articles for publication, the editors suggest the International Committee of Medical Journal Editors: Uniform requirements for manuscripts submitted to biomedical journals. The complete document is available in the June 1982 issue of the *Annals of Internal Medicine*.

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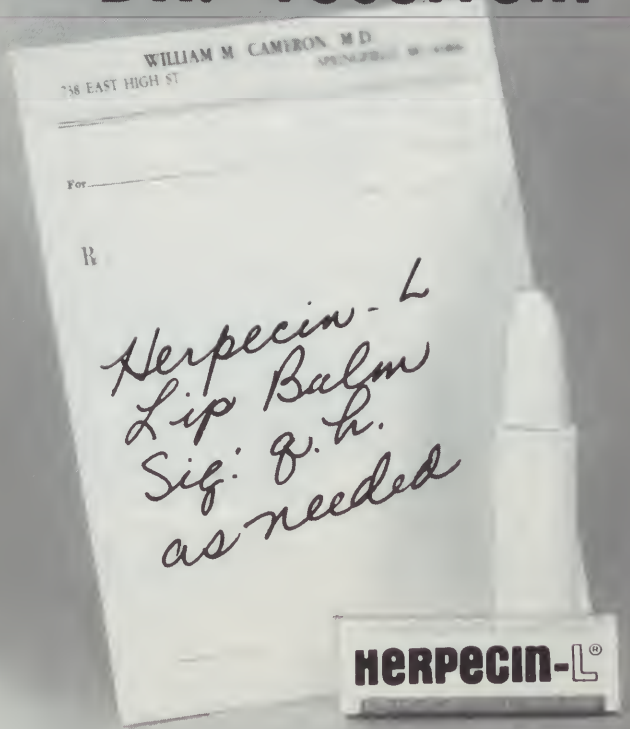
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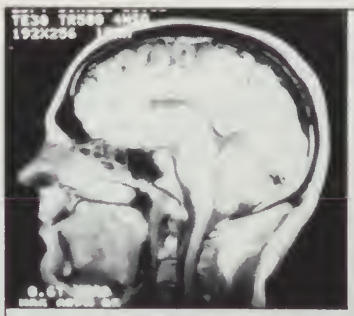
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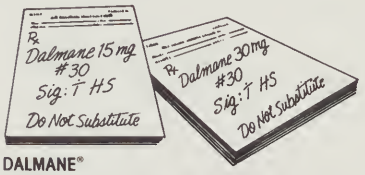
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Letters to the Editor

Reporting Guidelines

This letter is being sent to all pediatricians practicing in Maryland to inform you of the requirements of your local Department of HHS Regulations for the implementation of the 1984 "Baby Doe" amendments to federal Child Abuse legislation. The final HHS Regulations mandate that each state develop programs and/or reporting procedures that will allow them to identify and respond to reports of suspected medical neglect or the withholding of medically indicated treatment for disabled infants with life-threatening conditions. The intent of the rule by HHS is to establish procedures to assure that infants with handicapping conditions are not deprived of nourishment or medical care solely on the basis of their present or anticipated handicap(s).

The Maryland State Department of Human Resources, Social Services Administration, in conjunction with the Maryland Hospital Association, Med-Chi, and the Maryland Chapter of the AAP, has developed a reporting procedure that fulfills the requirements of the HHS Regulations. The reporting procedure will require hospitals providing care to infants to:

1. Designate a contact person (for example, an administrator, physician, nurse, or social worker) with whom the local DSS personnel will consult and coordinate its investigation—should a suspected case be reported to DSS.
2. Establish a mechanism for conducting a preliminary (telephone) investigation in response to a report of suspected medical neglect or withholding of indicated therapy.
3. Provide the DSS personnel with the name of the patient in question, the diagnosis, the therapy being provided, a description of any therapy being withheld, and the reason for withholding therapy.
4. DSS will then consult with an appropriate pediatric or surgical specialist to see if further action is warranted. If more information is appropriate, the consultant will be asked to make an on-site investigation and provide DSS with a recommendation for the appropriate course of therapy.

This change in the Child Abuse legislation and the HHS Regulations must be brought to the attention of health care personnel. To this end, HHS has allocated special funds for each state to conduct training programs and educational sessions regarding this law and the responsibility to report cases of suspected medical neglect. These programs will be organized and scheduled by the Central Office of the Social Services Administration throughout 1986.

Even though federal legislation has mandated that this system will be developed, it does not appear that widespread reporting will occur. Since March 1983 when the first preliminary guidelines were proposed, there has been only one reported case of suspected medical neglect in a Maryland hospital. Nevertheless, the Social Services Administration in each state *must* develop a reporting procedure, as outlined above, in order for them to continue receiving federal funding.

We hope the implementation of this reporting procedure will not affect any of you. But in the event you do become involved in a "suspicious" report of withholding therapy, we recommend that you speak openly and honestly with the medical consultant about the care and your management plan. You cannot avoid becoming involved once a case is reported. One way of dealing with these difficult cases is through the Infants Bioethics Committee. The Academy is strongly in favor of creating such committees in each hospital. We encourage you to become involved in this effort in your local communities.

***ANTHONY PERLMAN,* MD, Chairman**
Maryland Chapter, American Academy of Pediatrics

***JACOB K. FELIX* MD, Chairman**
Fetus and Newborn Committee

• • •

Maryland's Physicians' Income

In response to the editorial on the article "Physician Income and Its Sources: Maryland" in the March issue of the *Maryland Medical Journal*, I want to clarify several issues.

The article is a condensed version of the original study. *Journal* space limitations resulted in the loss of some details in the process of summarization. The purpose of the study was, essentially, to develop physician income data by sources in Maryland, since such data was nonexistent. National health expenditure models developed by the Health Care Financing Administration of USDHHS and Funds-Flow Studies done at the state level in a few areas were used as models. As an extension of such an effort, several issues were highlighted, and, to some extent, explanations were offered. Needless to say, there remain a host of unanswered questions calling for further investigation. One severe bottleneck in any such venture in this area is lack of data.

The editorial expressed concern about the period of the study and whether health planners in 1986 can budget based on the findings of 1975 to 1980. This kind of pioneering study is better judged by its methods and the application of these methods within the constraints of data rather than by time period. The period considered in the study used the most recent available data at its completion date, 1982. At this writing, an update has not been scheduled.

The editorial expressed concerns in several different ways regarding the inclusion of certain specialties (for example, general surgeons, obstetrician/gynecologists,

*Send letters to Editor, **MMJ**, 1211 Cathedral Street, Baltimore, MD 21201. We reserve the right to edit all submissions as necessary for clarity and conciseness.*

anesthesiologists, and radiologists) in the office-based category because "the bulk of their income is based on services provided in a hospital setting." The classification of office-based and hospital-based practices really depends on the criterion by which they are defined. The study used the American Medical Association (AMA) definition in this regard. According to the AMA, office-based, patient-care physicians were those who reported they spent the greatest portion of their hours in direct patient care either in a solo, partnership, or group practice setting or in a local, state, or federal government nonhospital setting.[1] A primary criterion of the AMA definition for hospital-based physicians was that such physicians were employed on salary by the hospital.[2] Included in this category were residents, interns, and full-time physician staff. The Table (excluded from the article because of space limitations) presents AMA data on the distribution of physicians in the office-based and hospital-based practices for 1978. It is evident that in each of the eight specialties (which include the four specialties identified by the editor) a relatively higher number of physicians are office based. The study focused on only these physicians since they reported themselves as office based in the AMA physician survey. Thus my total physician gross income estimates include only those physicians (including those in four specialties) who are in an office-based practice.

I am aware of the limitations of the data that exist in computing average gross income for Maryland physicians. Had such data been available, the study would not have been needed. Since Maryland belongs in the South Atlantic region, the average gross income for this region was used as a proxy. However, I was unable to compare physician costs in Maryland with those in other states in the South Atlantic region.

In several places the findings of the study confirm the usual supposition. Quantitative research with such results is as useful as that which contradicts anecdotal knowledge, as has been confirmed often in medical research.

The question the editor asks regarding Medicaid and Medicare payment patterns to primary care physicians is pertinent: why are Medicaid payments to primary care physicians double the Medicare payments to such physicians? In the study, I suggested that the difference might be caused by the differential fee patterns that existed for Medicaid and Medicare practices during the study period. From a survey conducted by Sloan *et al.*,[3] it was found that for seven selected procedures, Medicaid fees averaged about 75 to 80 percent of Medicare and Blue Shield fees and almost 60 percent of physicians' usual fees. In Maryland, in particular, the Medicare and Medicaid fee differential was much higher than for the nation as a whole. While the national average index for Medicaid/Medicare fees was equal to 77, that for Maryland was only 52 in 1975.[4] Beginning in fiscal year 1979, Maryland Medicaid fees for office visits have been increased gradually although the increase still fell short of increases in Medicare prevailing charges during the study period. Since the usual fees for primary care practitioners are closer to the Medicaid allowed fee than Medicare allowed charges, the primary care physicians are more likely to see more of Medicaid than Medicare patients.

I would like to add a few more questions to those asked by the editor:

- Why do Medicare and Medicaid physician preference patterns vary so much with regard to reimbursement for GPs? Is the difference in payment methods (to different specialties of physicians) under these two programs responsible for this? If so, by how much?
- Why have both Medicaid and Medicare reimbursement for primary care physicians increased at a higher rate in Maryland than in the nation as a whole? Does it reflect in part the relative success of policies in Maryland to promote primary care specialties, or does it reflect the reimbursement patterns across specialties in Maryland as against those in other states, or some other factor?
- Can it be argued that increasing competition in the field of psychiatry is causing the average per capita

Table. Distribution on Nonfederal Physicians in Patient Care by Service Setting and Specialties, Maryland 1978

	Office-Based		Hospital-Based		Total Patient Care	
	#	%	#	%	#	%
General Practice	671	83.0	135	17.0	806	100.0
Internal Medicine	838	57.5	619	42.5	1,457	100.0
Pediatrics	404	62.7	240	37.3	644	100.0
General Surgery	403	57.6	296	42.4	699	100.0
Obstetrics/Gynecology	499	72.5	189	27.5	688	100.0
Radiology	133	62.1	81	37.9	214	100.0
Psychiatry	456	65.5	240	34.5	696	100.0
Anesthesiology	222	71.4	89	28.6	311	100.0
Other	1,581	68.9	712	31.1	2,293	100.0
TOTAL	5,207	66.7	2,601	33.3	7,808	100.0

Source: American Medical Association, *Physician Distribution and Medical Licensure in the U.S.*, 1978.

income of psychiatrists to grow less rapidly? Is it the opposite in the case of anesthesiologists?

- Are the differential reimbursement methods for these two types of specialties responsible for the difference in the growth of their average receipts? (While only limited third-party coverage is available for a visit to a psychiatrist, more extensive coverage is available for seeing most other categories of physicians.) If so, this confirms the hypothesis that third-party payment is a major factor affecting the growth of physician fees.

References

1. Bobula, J.D. "Design and Methodology of the Twelfth Period Survey of Physicians." *Profile of Medical Practice*, American Medical Association, 1979.
2. Steinwald, B. "Hospital-Based Physicians: Current Issues and Descriptive Evidence." *Health Care Financing Rev* Summer 1980.
3. Sloan, F.; Cromwell, J.; and Mitchell, J.B. *A Study of Administrative Costs in Physicians' Offices and Medicaid Participation*, Final Report. Health Care Financing Administration, June 1977.
4. Burney, I.L.; Scheiber, G.J.; Blaxall, M.D.; and Gabel, J.R. "Geographic Variation in Physicians' Fees: Payments to Physician Under Medicare and Medicaid" *JAMA* 240(Sep 22, 1978).

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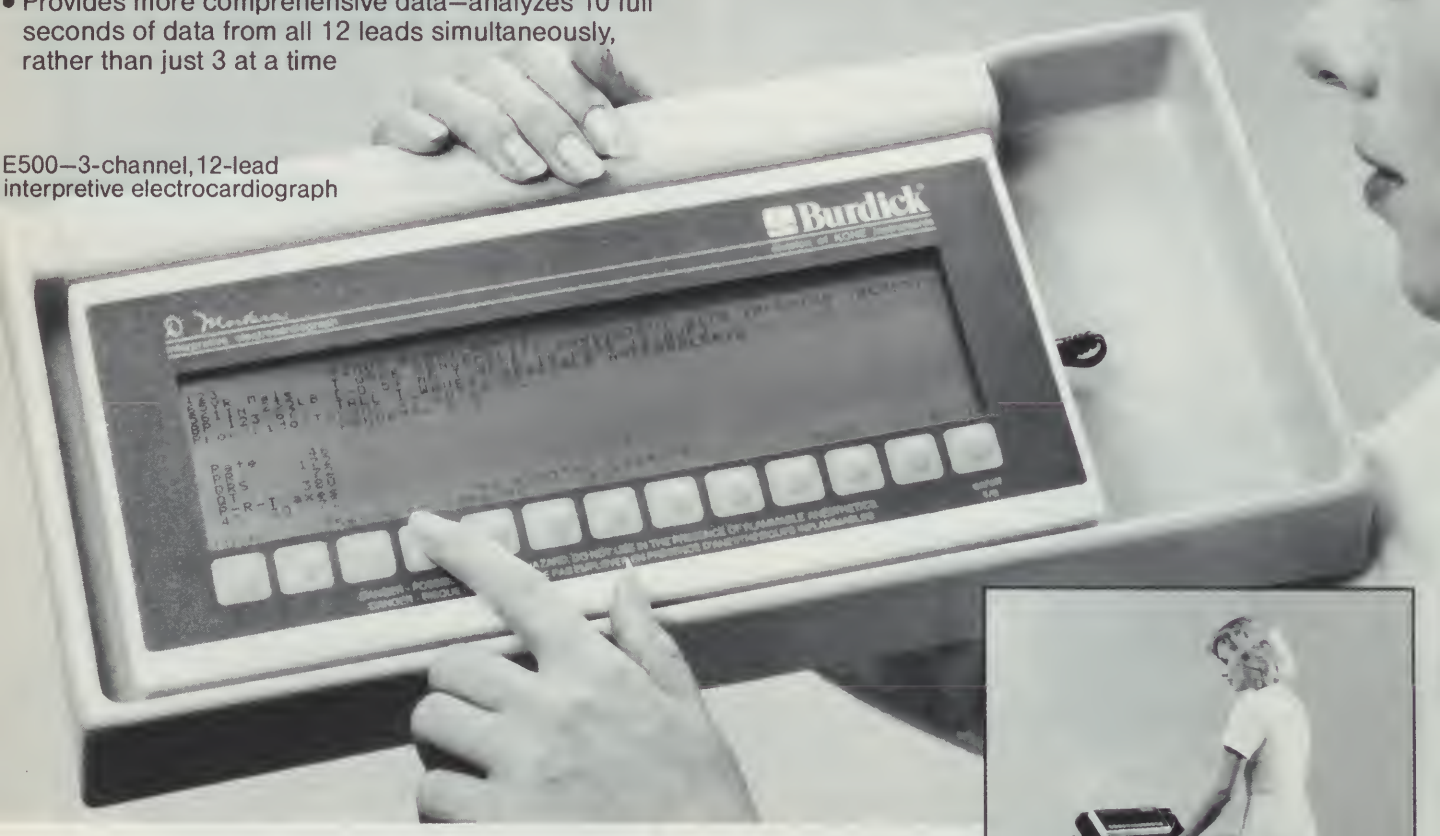
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May 1986

Arthropodborne Diseases of Maryland

(Continued from April Newsletter)

Arthropodborne viral encephalitis is transmitted by the bite of various mosquitoes. Eastern Equine Encephalitis (EEE) virus is reported in most years in Maryland whereas St. Louis encephalitis (SLE) is only sporadically reported in clusters.

The earliest cases of EEE may occur in June but most are seen late in the summer and fall. Mild infections are often seen as febrile headaches or aseptic meningitis. Severe infections usually have an acute onset, headache, high fever, meningeal signs, stupor, disorientation, coma and other encephalo-meningeal signs. These are acute inflammatory diseases of short duration. Subclinical infections are common. Incubation period varies from 5-15 days.

Horses like humans have no role in the maintenance of the disease and may be regarded as sentinels for the presence of the virus in mosquitoes. Other arthropodborne viral encephalitides do not occur in the State.

Encephalitis with the etiology specified is reportable in Maryland.

Tick paralysis is an uncommon disease, but non-infectious progressive ascending, flaccid motor paralysis following the bite of certain ticks, has been reported in Maryland. This disorder is caused by a neurotoxin apparently injected by an engorging tick. The toxin acts upon the spinal and bulbar nuclei, slowing motor nerve conduction without affecting neuromuscular transmission.

The tick must feed several days before symptoms of irritability and mild diarrhea develops. It is most often seen in children, usually girls, where the tick attaches to the scalp hidden by the hair. It may also be found in any part of the body; especially the ear, axilla, groin, vulva, or the popiteal region. Frank motor involvement results in weakness, poor leg control, diminished or absent tendon reflexes. Temporary improvement may occur but symptoms recur with flaccid paralysis which extends in one or two days to the trunk, arms, neck, tongue and pharynx.

There are usually no sensory changes other than paresthesia and hyperesthesia and little or no fever.

The definitive treatment is removal of the tick which is followed by a striking improvement within a few hours.

ROCKY MOUNTAIN SPOTTED FEVER (RMSF) PRECAUTIONS

Prevention of RMSF is best accomplished by careful inspection of persons who may have been exposed to ticks. Ticks should be removed by grasping them with tweezers as closely as possible to the point of attachment and pulling showly and steadily. If a portion of the mouth part remains, it should be treated like any other small foreign body, it may cause irritation, but it will not increase the risk of contracting RMSF. The fingers, protected with tissue paper, may be used to remove a tick from a person if tweezers are not available, but should always be washed after the removal of a tick. The fingers should not be used to detick dogs. Persons living and working in tick-infested areas should be educated about the prevention, symptoms, and signs of the disease. No vaccine against RMSF is currently available. RMSF cases should be reported to appropriate local and state health departments.

From the Centers for Disease Control (CDC), Morbidity and Mortality Weekly Report (MMWR), April 18, 1986/Vol. 38/No. 15.

CIGUATERA FISH POISONING

Ciguatera is a form of poisoning caused by eating fish such as red snapper, grouper, barracuda, amberjack, surgeonfish, sea bass, and a wide range of other tropical reef fish. Ciguatoxin is derived from the single-celled marine plant Gambierdiscus toxicus. The toxin is ingested by herbivorous fish, which are in turn ingested by larger carnivorous fish in whose organs and flesh the toxin is concentrated. Larger sized fish (such as would usually be served in restaurants) contain higher concentrations of ciguatoxin than smaller fish. The presence of the toxin in fish is unpredictable and episodic, but it often follows storms, earthquakes, and other natural or man-made disturbances of the coral reef system. In the Caribbean, ciguatera fish poisoning has been reported recently in residents of and visitors to the U.S. Virgin Islands, the U.K. Virgin Islands, Puerto Rico, the Bahamas, and Nevis. However, the potential for ciguatera poisoning exists in all subtropical and tropical insular areas of the West Indies, Pacific and Indian Oceans where the implicated fish species are consumed.

Ciguatera poisoning may produce gastrointestinal and neurologic symptoms, shock, and, infrequently, death. Among the more common symptoms are diarrhea, vomiting, abdominal cramps, sweating, chills, prostration, muscle and joint pain, paralysis, reversal of hot and cold sensation, tingling or numbness of the mouth, dizziness, and blurred vision or temporary blindness. In more severe cases, cardiovascular collapse or respiratory failure may occur. Neurologic symptoms may persist for weeks or months.

There is no practical way for consumers to identify affected fish since the appearance, smell, and taste are unchanged (although a slight metallic taste may occasionally be noticed). Since the toxin is heat-stable, cooking does not make the fish safe to eat. The only effective preventive measure is to abstain from eating red snapper, grouper, barracuda, amberjack, surgeonfish, sea bass, and other tropical reef fish. Because the nature of the symptoms may produce diagnostic confusion, it is important for travelers who may have eaten implicated fish and who subsequently develop symptoms compatible with ciguatera fish poisoning to remember to inform their physicians of the exposure to tropical reef fish.

From U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control, Atlanta, Georgia 30333, ADVISORY MEMORANDUM NO. 84, dated February 7, 1986.

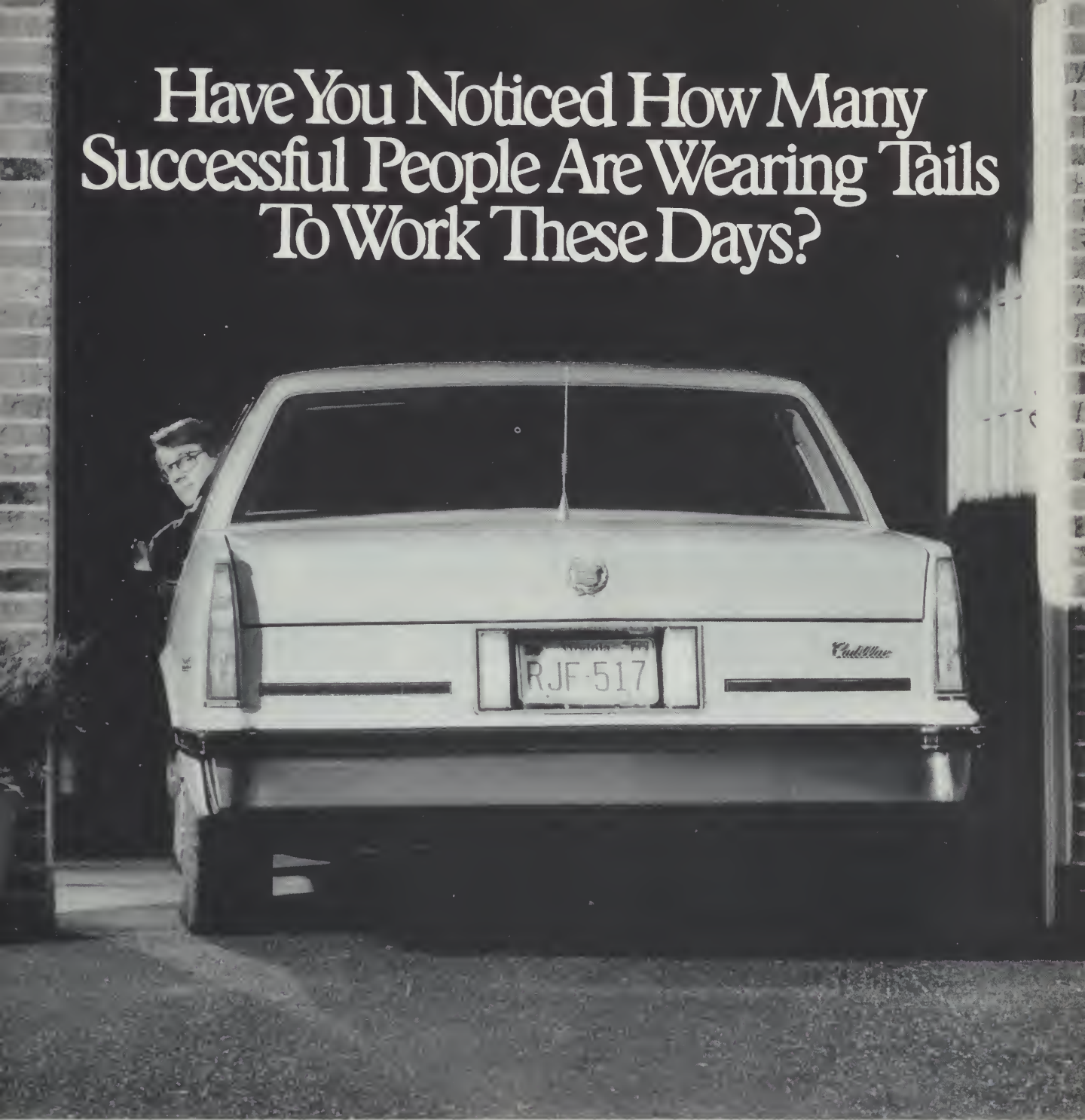
MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE
REPORTED CASES OF NOTIFIABLE DISEASES IN MARYLAND IN 1985 BY ONSET DATE

							VIRAL HEPATITIS																	
		RUBEOLA (MEASLES)	RUBELLA (GERMAN MEASLES)	INF. PAROTITIS (MUMPS)	PERTUSSIS	A	B	NA/NB	UNSP.	MENINGOCOCCAL INFECTIONS	MENINGITIS, H. INFLUENZAE	MENINGITIS, VIRAL	ENCEPHALITIS, VIRAL	ROCKY MOUNTAIN SPOTTED FEVER	TUBERCULOSIS	SALMONELLOSIS	TYPHOID FEVER	SHIGELLOSIS	SYPHILIS, PRIMARY AND SECONDARY	SYPHILIS OTHER	GONORRHEA	ANIMAL BITES	RABIES, ANIMAL
STATE TOTALS	1985	115	6	38	312	89	709	120	52	61	100	281	32	27	434	1504	12	190	500	663	31270	11065	760
	1984	22	1	46	59	60	694	109	85	46	118	215	37	26	427	1346	3	242	451	704	28480	11484	1100
	1983	11	3	45	39	120	827	98	95	53	93	273	24	34	409	1407	6	462	517	799	30368	12071	838
	1982	5	36	34	80	177	764	98	124	44	87	119	22	37	540	1257	12	144	491	803	32179	11752	152
	1981	5	1	109	1	211	768	64	247	66	58	140	28	70	621	1287	13	182	613	1044	29210	11337	50
	Population Maryland State	4,270,420																					
	Baltimore City	769,800	1	--	7	168	19	294	12	8	13	20	38	5	2	182	442	1	96	297	336	18630	2210	30
	Counties, total	3,500,620	114	6	31	144	70	415	108	44	48	80	243	27	25	252	1062	11	94	203	327	12640	8796	730
POLITICAL SUBDIVISION	Allegany	78,490	--	--	1	1	5	5	1	2	2	3	7	1	--	3	15	1	1	1	1	92	367	10
	Anne Arundel	381,090	--	--	5	12	7	45	10	3	8	9	18	2	5	18	109	--	10	11	12	1062	1510	75
	Baltimore Co.	666,190	2	1	2	80	9	66	21	5	12	9	39	4	2	29	198	2	9	17	27	1351	821	244
	Calvert	36,490	--	--	--	--	--	6	--	--	1	--	--	--	--	2	13	--	2	1	--	125	91	32
	Caroline	23,290	--	--	1	--	2	2	1	--	1	1	7	--	3	3	7	--	--	7	1	152	69	1
	Carroll	99,850	1	--	--	10	3	4	6	--	--	4	8	3	1	2	41	--	2	2	2	69	390	78
	Cecil	62,680	--	--	1	--	1	6	4	1	1	3	5	1	1	2	19	--	4	1	4	199	301	1
	Charles	78,010	--	--	1	2	1	5	3	1	2	7	7	--	--	7	42	--	1	9	13	241	248	43
	Dorchester	30,170	--	--	1	2	1	10	1	--	1	--	9	1	--	0	22	--	--	14	12	412	82	--
	Frederick	119,640	--	--	--	7	1	7	2	2	1	--	2	--	4	10	26	--	1	1	3	246	466	38
	Garrett	26,610	--	--	1	--	--	--	--	--	--	--	6	--	--	0	3	--	--	--	--	9	88	17
	Harford	147,820	--	--	--	7	3	11	5	2	2	3	18	4	1	9	40	--	6	8	21	405	485	27
	Howard	127,040	--	--	1	4	10	12	5	1	2	2	9	2	--	7	83	--	14	2	3	238	408	29
	Kent	16,440	--	--	--	--	--	1	1	--	--	--	--	--	--	0	1	--	--	1	--	39	39	--
	Montgomery	598,530	12	5	8	4	15	74	17	7	6	14	41	4	2	65	157	4	10	21	40	1015	947	26
	Prince George's	668,180	98	--	8	10	6	107	9	10	5	13	29	1	1	70	165	5	11	69	144	5259	1449	79
	Queen Anne's	26,390	--	--	--	--	1	7	3	--	--	2	4	--	3	6	6	--	--	1	2	94	86	--
	Saint Mary's	61,940	1	--	--	4	--	5	2	1	1	--	--	--	2	1	17	--	7	3	7	195	190	24
	Somerset	18,460	--	--	--	--	--	2	1	--	--	--	2	1	--	1	4	--	5	1	4	93	54	--
	Talbot	26,240	--	--	--	--	1	4	--	1	1	--	7	2	--	1	17	--	1	3	2	183	55	--
	Washington	110,530	--	--	--	--	--	20	3	5	--	5	16	1	--	6	12	--	1	6	11	251	347	6
	Wicomico	65,010	--	--	1	1	4	6	11	3	1	4	7	--	--	7	50	--	9	21	13	635	291	--
	Worcester	31,530	--	--	--	--	--	10	2	--	1	1	2	--	--	3	15	--	--	3	5	275	71	--

OTHER DISEASES	STATE	BALTO. CITY	COUNTIES
AIDS	155	57	98
Amebiasis	11	2	AA-1, How-1, Mont-4, PG-2, Wic-1
Botulism	1	--	Mont-1
Chickenpox	1407	146	Al-14, AA-194, Balt-56, Calv-2, Carol-11, Ce-48, Ch-42, Dor-1, Fr-80, Gar-1, Har-1, How-120, Mont-8, PG-656, QA-1, Som-1, Wic-16, Wor-9
Guillain-Barré syndrome	29	4	Al-1, AA-2, Balt-6, Carroll-2, Fr-1, Har-4, Mont-4, PG-4, Wic-1
Influenza-like illness	1143	703	AA-52, Balt-37, Carol-30, Ce-2, Ch-114, Har-1, How-111, PG-76, Tal-1, Wor-16
Kawasaki syndrome	23	7	AA-3, Balt-5, Carroll-1, Fr-1, Mont-3, StM-1, Tal-2
Legionellosis	12	3	AA-1, Fr-1, How-1, Mont-1, PG-2, QA-1, Wash-1, Wic-1
Leprosy	1	--	AA-1
Malaria	29	6	AA-1, Balt-1, Mont-10, PG-10, Tal-1
Meningitis, bacterial, other*	129	45	Al-2, AA-8, Balt-10, Calv-1, Carol-2, Carroll-1, Ce-2, Ch-1, Dor-2, Fr-4, Gar-2, Har-6, How-3, Mont-15, PG-13, Som-3, Tal-2, Wash-6, Wic-1
Mycobacteriosis, atypical	55	6	AA-14, Balt-5, Cal-2, Dor-1, Har-1, Mont-8, PG-15, StM-1, Wash-2
Non-staph infections in newborn	119	20	Al-1, AA-6, Balt-48, Carroll-5, Ce-1, Fr-4, Har-13, How-2, Mont-7, PG-9, Som-1, Wash-1, Wic-1
Staph infections in newborn	53	7	Al-4, AA-4, Balt-10, Carol-4, Ch-1, Har-3, How-4, Mont-2, PG-4, QA-1, StM-3, Som-4, Tal-1, Wic-1
Psittacosis	1	--	Balt-1
Reye syndrome	1	--	Har-1
Streptococcal infections	13374	3024	Al-1031, AA-1216, Balt-480, Calv-11, Carol-44, Carroll-4, Ce-149, Ch-1536, Dor-4, Fr-3, Gar-2, Har-21, How-1760, Kent-2, Mont-31, PG-2265, QA-15, StM-217, Som-55, Tal-246, Wash-516, Wic-535, Wor-207
Tetanus	2	1	Tal-1

*excluding N. meningitidis and H. influenzae meningitis.

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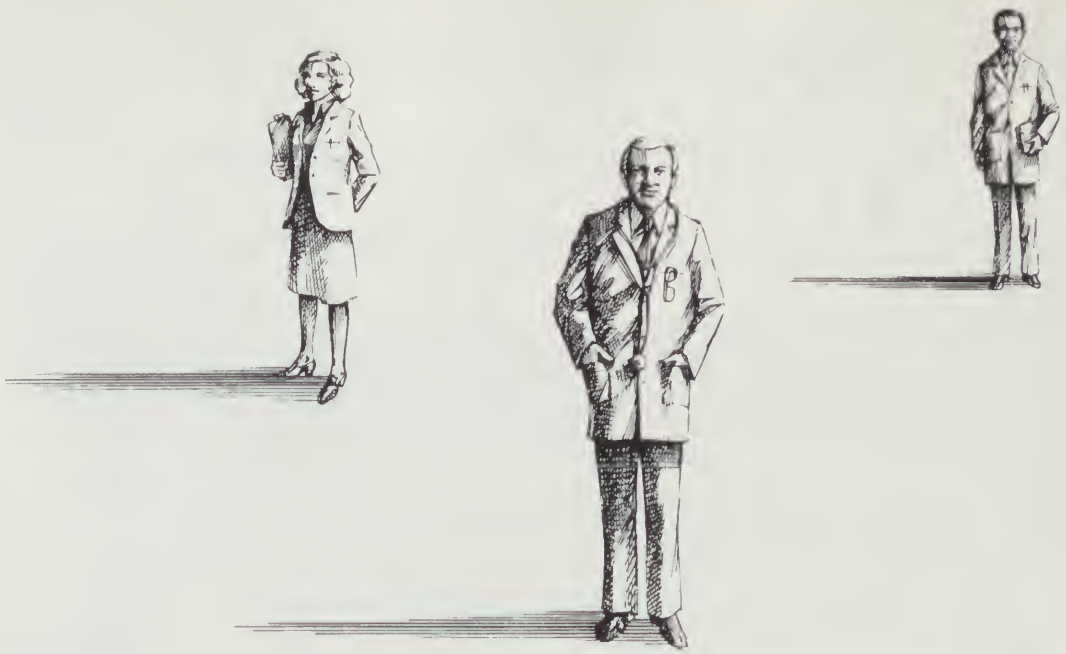
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Executive Director's Newsletter

May 1986

MALPRACTICE LEGISLATION

Congratulations! Your active interest and participation in the malpractice activity made the difference in Annapolis this year. Donald T. "Ted" Lewers, MD, who served as Faculty lobbyist during the session, Israel Weiner, MD, Chairman of the Legislative Committee, and William Finney, MD, with the MMLR Board, who kept the heat turned up, deserve your personal thanks for their outstanding leadership. Here's the scorecard:

WINS

$350,000 cap on non-economic losses for all personal injury actions

Itemized awards

Periodic payments for future economic damages with unpaid balance of future medical expenses reverting to the defendant's insurer upon death of plaintiff

Certificate of merit for both plaintiff and defendant who disputes liability

Expert witness may not devote more than 20% of professonal activity to testifying in personal injury claims

Mandatory availability for health claims arbitration panels of all licensed physicians living in Maryland

Annual reporting by medical liability insurers on claims experience to be submitted to the General Assembly

LOSSES

Collateral source rule

Lowering of statute of limitations for minors

PEER REVIEW REPORTING

In addition, new legislation provides for a much expanded and coordinated reporting system. The Commission on Medical Discipline will receive notice of all complaints filed against a physician and of all claims filed with the Health Claims Arbitration Office. Hospitals will submit biannual reports of all physicians with privileges and any action or change made in those privileges. Failure to report will result in a civil penalty. Hospitals, as a condition for licensure, will establish a formal credentialing process that will include a reappointment process documenting claim analysis, review of clinical skills, and CME requirements.

THANK YOU

This is the first significant change in the malpractice laws in Maryland since the establishment of the Health Claims Arbitration Office. Legislators who significantly assisted with the passage and who should be thanked are Lt. Governor J. Joseph Curran, Jr., Senate President Melvin Steinberg, House Speaker Ben Cardin, Senate Judicial Proceedings Chairman Thomas V. "Mike" Miller, House Judiciary Committee Chairman Joseph Owens, Senators Walter Baker, Barbara Hoffman, and Vernon Boozer, Delegates William S. Horne and Larry Young.

MORE TO DO

1986 is also an election year. In addition to thank you notes, candidates who have supported the initiatives of organized medicine over the past four years deserve financial support, active campaign participation, and your vote. PRIMARY ELECTION DAY IS SEPTEMBER 9, 1986. A survey completed by our auxiliary indicates a disappointing lack of participation in the elective process by physicians. Please consider:

1. Contributing to MMPAC - your voice for political support - Sustaining Member dues - $100

2. Volunteering your time to help the candidate of your choice.

3. VOTING September 9 and November 4. If you are <u>not</u> registered, call Diane Sakwa at the Faculty office to find out how.

MEDICAL MUTUAL INCREASE

Unfortunately, all the "success" achieved by this effort must seem hollow to many in light of the 50% increase requested by Medical Mutual Liability Insurance Society in its most recent rate filing. Although legislation usually does not have an immediate effect on premiums, company officials lowered their original projections by 30% as a result of the tort package. A public hearing on the rate filing is likely to be conducted so the figures can be analyzed.

The Faculty will be preparing formal comment as well as exploring the problem of insurance unavailability in response to the resolution of the Carroll County Medical Society adopted by the House of Delegates in April.

Acting Executive Director

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HBP Commentary

The New National Cholesterol Education Program

JAMES I. CLEEMAN MD

A new National Cholesterol Education Program, administered by the National Heart, Lung, and Blood Institute, is developing educational initiatives for physicians, other health professionals, patients, and the public on the significance of elevated blood cholesterol as a risk factor for coronary heart disease and the benefits of cholesterol lowering. Two important elements to be developed are a program of continuing medical education for physicians about practical approaches to the management of high blood cholesterol and a set of detailed recommendations about its diagnosis, evaluation, and treatment.

Dr. Cleeman is Coordinator, National Cholesterol Education Program; Office of Prevention, Education and Control; National Heart, Lung, and Blood Institute, National Institutes of Health.

A large body of evidence from laboratory, epidemiological, and clinical studies has shown that an elevated blood cholesterol level is one of the most important risk factors for coronary heart disease, along with high blood pressure and smoking. Blood cholesterol levels can be lowered safely by both diet and drugs. The results of the Lipid Research Clinics Coronary Primary Prevention Trial (CPPT) are the latest additions to this body of information and provide long-sought definitive evidence that lowering elevated levels of blood cholesterol is an effective way to reduce the risk of coronary heart disease.[1,2] In light of the evidence, it is important that physicians and the public be made aware of the significance of elevated blood cholesterol as a risk factor for coronary heart disease and of the benefit of cholesterol lowering.

Physician Attitudes and Practices

A recent survey of physicians suggests that their understanding of key facts about elevated cholesterol and its treatment is not adequate. In late 1983, just before the release of the CPPT results, approximately 1,600 physicians were surveyed by telephone about their knowledge, attitudes, and practices with respect to blood cholesterol.[3] Table 1 shows physician attitudes regarding the efficacy of three interventions: smoking cessation, reduction of elevated blood pressure, and reduction of elevated blood cholesterol. The column labeled "Large" shows that 88 percent of physicians surveyed thought smoking cessation would have a large effect on the risk of coronary heart disease and 75 percent thought reducing elevated blood pressure would have a large effect, but only 39 percent thought that reducing elevated blood cholesterol would have a large effect. Whether physicians continue to be less convinced about the efficacy of lowering elevated cholesterol levels in the post-CPPT era, now that the results have been disseminated, will soon be determined by a resurvey of physicians being conducted.

Table 2 shows the median blood cholesterol levels at which physicians begin *diet* therapy with their patients. There are differences among the various types of physicians, but the overall median at which diet therapy is started is 260 to 279 mg/dl. This finding means that many physicians are reserving the use of diet therapy for patients who are in the top 5 percent of the cholesterol distribution, whereas diet therapy for the top 25 percent was recommended by the expert panel of NIH's December 1984 consensus conference, "Lowering Blood Cholesterol to Prevent Heart Disease."[4] The overall median cholesterol level at which internists and family/general practitioners prescribe drug therapy is 340 to 359 mg/dl (Table 3, next page). This means they are reserving the use of *drug* therapy for patients in the top 1 percent of the cholesterol distribution, as contrasted to the consensus panel's recommendation to use drug therapy for patients in the top 5 to 10 percent of the distribution. These survey data point to the need for a substantial continuing education effort directed toward physicians.

Table 1. Physician Attitudes Regarding Efficacy of Intervention

Intervention	Effect on CHD Risk (in %)		
	Large	Moderate	Little
Smoking cessation	88	11	1
Reduce elevated blood pressure	75	23	2
Reduce elevated blood cholesterol	39	52	8

Table 2. Physician Practice: Diet Therapy

Physicians*	Median Blood Cholesterol Levels at which Diet Initiated (mg/dl)
Cardiologists	240–259
Internists	280–299
Family/General Practitioners	280–299

* 4 percent report never initiating diet therapy.

HBP Commentary is contributed by the Maryland High Blood Pressure Commission, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

Table 3. Physician Practice: Drug Therapy

Physicians*	Median Level at which Drug Initiated (mg/dl)
Cardiologists	300–319
Internists	340–359
Family/General Practitioners	340–359

* 28 percent report never using drugs.

Public Attitudes

A survey of the public, conducted at about the same time as the physicians' survey, found that the public was less convinced of the benefit of reducing high blood cholesterol than of modifying the other two major risk factors. Whereas 85 percent of the public thought that smoking cessation would have a large beneficial effect in preventing coronary heart disease, and 82 percent thought that reducing high blood pressure would have a large effect, only 64 percent thought that lowering high blood cholesterol would have a large effect.

When attitudes of the public are compared to those of physicians, 64 percent of the public (but only 39 percent of physicians) thought that lowering high blood cholesterol would have a large effect on coronary heart disease. It may be that the public is ahead of the physician community on this issue, but it is also possible that substantial confusion has been engendered in the physician community by previous conflicts and controversies on this subject.

The public also was asked "Have you ever had your blood pressure checked?" and only 2 percent said "no." When asked "Have you ever had your blood cholesterol checked?" *65 percent* said "no." If it is the case that 65 percent have not had their blood cholesterol checked, both physicians and the public must be encouraged to pay closer attention to this risk factor. It is possible that blood cholesterol levels had been measured but people were not aware of it, which would represent a significant communication gap between physician and patient. All these survey findings pose educational challenges that must be met.

Recommendations by the Consensus Panel

As a follow-up to the CPPT results, the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) have conducted several activities to consolidate the science base. In June 1984 NHLBI sponsored a workshop to examine the CPPT data in depth and to relate those results to other research findings. In December 1984, a Consensus Development Conference on Lowering Blood Cholesterol to Prevent Heart Disease, convened by NIH, developed recommendations for health professionals and the lay public regarding levels of cholesterol requiring treatment, the goals of treatment, and issues relating to the use of diet and drugs in the lowering of cholesterol. (These recommendations will be reviewed in *HBP Commentary.*) Three major recommendations are worth highlighting:

- A patient recommendation: people with blood cholesterol levels that place them at or above the 75th percentile—that is, in the upper 25 percent of the population—should be treated intensively, first by diet and then, if sufficient cholesterol lowering is not achieved, by the addition of a drug.
- A public recommendation: the public ought to exercise prudence with respect to the intake of total dietary fats, saturated fats, and cholesterol.
- A recommendation that the Institute continue planning for a National Cholesterol Education Program (NCEP).

Developing NCEP

The Office of Prevention, Education and Control in NHLBI is coordinating the development and operation of the NCEP, the purpose of which is to reduce coronary heart disease morbidity and mortality related to elevated blood cholesterol. This will be accomplished through a national educational effort and through extensive cooperation and coordination with organizations and groups in the private sector as well as other government agencies. The development of the NCEP will rely on important principles derived from NHLBI's experience with the National High Blood Pressure Education Program, principles that have made the program a success and that have contributed to high blood pressure control: first, building on a strong science base; and second, forming a network of partnerships with other health and medically related organizations and associations to achieve the objectives of the program. The NCEP has established a Coordinating Committee to act as a national focus for mobilizing and coordinating the resources and energies of all interested groups. This body consists of over 20 member organizations that can expand the educational reach of the NCEP through their own constituencies, as well as liaison representatives from federal agencies. (The Maryland High Blood Pressure Commission is represented by members and staff as invited guests at Coordinating Committee meetings.) The Coordinating Committee is chaired by Claude Lenfant MD, Director of NHLBI.

The NCEP plans to develop educational initiatives for physicians and other health professionals, their patients, and the public to increase awareness of the importance of lowering elevated blood cholesterol levels and to provide the necessary information and skills to use dietary changes and drugs to accomplish this reduction. There are plans to develop cholesterol-lowering programs at the workplace and to foster incorporation of such programs in existing workplace health promotion and disease prevention programs. Curricu-

lum changes also will be encouraged to increase the awareness of primary and secondary school students about the role of blood cholesterol as a risk factor for heart disease.

Professional Education Activities

An initial emphasis of the NCEP will be on professional education, and several activities are now getting under way in this area. There is a clear need for better guidance to physicians and other health professionals about the management of patients with elevated cholesterol levels. To meet this need, the NCEP will establish two expert panels, one dealing with adults and one dealing with children, to develop detailed recommendations on the diagnosis, evaluation, and treatment of high blood cholesterol. The panels' work will take a year to complete. Recommendations will be issued as a report to professionals similar to what has been done in the high blood pressure area, where guidelines developed by the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure[5] have been well accepted.

Until definitive recommendations are available from the panels, interim guidance on the treatment of adults is available in a booklet, *Cholesterol Counts*.* This publication, developed out of a roundtable discussion among three physicians and two dietitians who participated in the CPPT, distills their experienced advice about how to detect and treat high blood cholesterol and provides practical tips to help patients adhere to a regimen of diet or drug.

While this is very useful information, no booklet is adequate by itself to provide complete education. The NCEP is therefore interested in designing a continuing medical education curriculum to provide the proper educational framework. We are working with the Center for Health Education in Maryland to develop the curriculum, which will incorporate *Cholesterol Counts* as an initial source of guidance and which will eventually build on the recommendations of the expert panels.

There will also be a panel on laboratory standardization. Physicians and other health professionals must be able to rely on the results they receive from laboratories concerning cholesterol levels.

Since neither the testing methods nor the reporting of results is adequately standardized, a panel will try to foster improvements in this situation.

The NCEP is cooperating with two "Physician First" campaigns, so-called because they target physicians as the first audience for education about cholesterol. One project, directed by Robert Levy MD of Columbia University, will offer a variety of educational vehicles dealing with various aspects of lipoprotein abnormalities. The other project, directed by Thomas Pearson MD at Johns Hopkins University, will encourage physicians to have their own cholesterol levels measured. This approach has the potential to stimulate interest among physicians concerning blood cholesterol. Once they have determined their own cholesterol level, physicians may be persuaded to be more active in addressing this risk factor in their patients.

Finally, in addition to our national resurvey of physicians and the public, we are planning to survey nurses and dietitians about their cholesterol awareness, attitudes, and practice. NCEP will develop educational efforts directed to these health professionals because they will play an important role in dealing with high blood cholesterol levels, especially in such areas as diet and drug counseling.

For further information about the NCEP, physicians may contact my office:

National Cholesterol Education Program
Office of Prevention, Education and Control, NHLBI
Building 31, Room 4A18
Bethesda, MD 20892.

* Copies may be obtained from: National Cholesterol Education Program, Box C, NHLBI, Building 31, Room 4A-21, Bethesda, MD 20892.

References

1. Lipid Research Clinics Program. "The Lipid Research Clinics Coronary Primary Prevention Trial Results I. Reduction in Incidence of Coronary Heart Disease." *JAMA* 251(1984):351–64.
2. Lipid Research Clinics Program. "The Lipid Research Clinics Coronary Primary Prevention Trial Results: II. The Relationship of Reduction in Incidence of Coronary Heart Disease to Cholesterol Lowering." *JAMA* 251(1984):365–74.
3. National Survey of Physicians, 1983, NHLBI, unpublished data.
4. "Lowering Blood Cholesterol to Prevent Heart Disease—Consensus Conference Statement." *JAMA* 253(1985):2080–86.
5. "The 1984 Report of the Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure." *Arch Intern Med* 144(1984):1045–57.

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Commission Launches Public Education Campaign

The Maryland High Blood Pressure Commission's Public Education Committee has launched an extensive public education campaign to encourage uncontrolled hypertensives to work with their doctors to establish and reach their goal blood pressures. The slogan is *GO FOR YOUR GOAL*. We are alerting physicians to this patient-oriented effort.

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Maryland Oncology Newsletter

Do Polyps Become Cancer?

Not all polyps become cancerous. However, some believe that colorectal cancers arise from antecedent adenomas or neoplastic polyps.[1] This opinion is not shared by others.[2,3] Polyps occur in 10 percent of the general population, and this incidence increases with age. They also occur in the colon that contains cancer.

There are nine types of polyps:

1. *Benign hyperplasia of the mucosa* Flat sessile lesions that measure 1 to 5 mm in diameter are benign lesions and represent outgrowth of the mucosa.

2. *Adenomatous polyp* Also known as adenomas, these are usually benign, may reach variable sizes, and are attached to the colon by a stalk. Occasionally, focal atypia or *in situ* carcinomas are seen in them. This type of lesion initiated the controversy of whether these are premalignant. Cancer has been observed in 1 percent of adenomas up to 1 cm in size, in 10 percent of adenomas between 1 and 2 cm, and in 30 to 50 percent of those over 2 cm in size. Patients with multiple adenomas have a greater chance of having a malignant adenoma than patients with a solitary adenoma. In the presence of one adenoma, there is a 40 percent chance of additional adenomas elsewhere in the colon (synchronous) and 30 percent chance that the person will develop additional adenomas subsequently (metachronous). Patients with adenomas are at increased risk for colorectal cancer, but if they are removed they are at lower risk.

3. *Villous or sessile adenoma* Papillary lesions are attached to the colon with a wide base. They can be as large as 15 cm in diameter and are commonly found in the rectum and sigmoid colon. They secrete mucus rich in potassium. Thirty percent of the small lesions harbor cancer, an incidence that rises to 60 percent in large lesions. Occasionally, the head of an adenoma contains a villous structure.

4. *Multiple polyposis* Controversy exists on how many polyps should exist simultaneously to constitute this syndrome. Some believe 3 or more, while others believe 100 or more. This is important because such patients have high incidence of large bowel cancer. This is also true if these polyps develop consequently. With the availability of colonoscopy, patients with few polyps can be managed by colonoscopic removal of these polyps; the patient is followed by endoscopy and barium enema. However, if these polyps are numerous, total colectomy is in order. Multiple pseudopolyps in patients with colitis should be treated by colectomy.

5. *Familial polyposis* A genetic disorder that is transmitted as an autosomal dominant trait. If a patient presents with multiple polyposis and has a familial history of the disease, he/she is considered to have familial polyposis. These patients usually have hundreds of polyps throughout their colons. It is seldom diagnosed before age 10, and the mean age of diagnosis is around 30. This syndrome should be diagnosed as early as possible because almost all will die of colon cancer before age 50 if left untreated.

6. *Gardner's syndrome* Another genetic disorder inherited as an autosomal dominant trait. The colon contains hundreds of polyps, and these patients have osseous and soft tissue lesions: osteoma in the skulls, cortical thickening of bones, desmoid tumors of peritoneum, and surgical scars. Most of the polyps are adenomatous polyps and are precancerous.

7. *Turcot syndrome* Familial disorder, probably an autosomal recessive disease. The patient will have multiple polyposis and neurologic tumors.

8. *Peutz-Jeghers syndrome* A rare hereditary disorder with an autosomal dominant trait. Multiple polyps can be found throughout the GI tract, except the esophagus, accompanied by deep melanin pigmentation of the lips, buccal mucosa, fingers, and occasionally anal mucosa. The polyps in these cases are not true adenomas, but hamartomas that are benign mucin-filled cysts with an epithelial lining of goblet cells. These are considered nonmalignant, but the patient may have co-existing adenomatous polyps. Tumors of the ovary have been reported in these patients.

9. *Juvenile polyposis* A benign and not a precancerous condition. It is hereditary through an autosomal dominant trait and manifests itself in childhood at the average age of six years. These are false polyps, hamartomas, which are found in the rectum and colon. They can cause abdominal pain, mucus diarrhea, and rectal bleeding.

References

1. Morson, B.C. "Genesis of Colorectal Cancer." In Sherlock, P. and Zamcheck, N. (eds.). *Clinics in Gastroenterology* Vol. 3, No. 3. London: W.B. Saunders, 1976, p. 505–26.

2. Spratt, J.S.; Jr; Ackerman, L.V.; and Moyer, C.A. "Relationship of Polyps of Colon to Colonic Cancer." *Ann Surg* 148(1958):682–96.

3. Castleman, B. and Krickstein, H.I. "Do Adenomatous Polyps of the Colon Become Malignant?" *N Engl J Med* 267(1972):469–75.

Tumor Conferences are held weekly on Fridays between 8–9 am in Room N13E28 at the University of Maryland Hospital. This is an open meeting and physicians are welcome to attend. Physicians can present cases; but please call 528-5224 before Friday to obtain time on the schedule for your case(s) and bring the pathological slides with you.

***E. GEORGE ELIAS* MD**
University of Maryland, Surgical Oncology Program

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

Pediatric Morning Report

Diagnostic Lung Puncture

One of the more common and frustrating problems in pediatrics is the inability to make a specific etiologic diagnosis in cases of pneumonia. Empiric therapy is in fact the rule. While this is undoubtedly based on a sound knowledge of the common etiologic agents and their clinical and radiographic presentations, it is none the less somewhat disconcerting, especially if the presentation is atypical or the response to therapy is inadequate. One such case under our care recently prompted a discussion of a diagnostic tool that has fallen out of favor in recent years: lung puncture. A review of the literature revealed extensive worldwide experience with this procedure with impressive results. In a study that is most applicable to our patient population, pathogens were identified in 10 of 28 patients undergoing lung puncture (Klein, *Pediatrics* 44:486, 1969). Complications included pneumothoraces in three patients and hemoptysis in one. This topic engendered a great deal of debate among our housestaff and is far from becoming a routine procedure in our institution. However, it certainly does have some utility and probably should be considered in immunocompromised patients and in critically ill patients, especially those who appear to be failing courses of empiric therapy.

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Dilantin Hypersensitivity

A 12-year-old boy presented to our emergency room with fever, adenopathy, and an erythematous rash. His past medical history was remarkble for a seizure disorder for which he recently had been placed on Dilantin. The primary diagnostic considerations were a viral syndrome and Dilantin hypersensitivity. The Dilantin was discontinued, but his disease progressed dramatically. In addition to persistent fever and marked adenopathy, he went on to develop erythema multiforme, hepatomegaly with markedly elevated liver function tests, eosinophilia, anemia, pulmonary edema, and renal failure. A review of the literature revealed that the exact constellation of signs and symptoms seen in our patient is a well-described manifestation of Dilantin hypersensitivity. Patients may exhibit any combination of the above findings. Rash is the most common, with fever and adenopathy following; patients such as ours are luckily quite uncommon. Reactions are seen most often during the first two months of therapy. Steroids may be used when necessary, and our patient recovered fully on high-dose steroids. It is important for us all to be aware of the many manifestations of Dilantin hypersensitivity and their potential severity. The drug should be promptly discontinued at the first sign of such a reaction. (Haruda, *Neurology* 29:1480, 1979).

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Renal Anomalies: Early Red Flags

As pediatricians we become practiced at naming a variety of congenital syndromes. Probably even more important, however, is the ability to identify certain apparently isolated anomalies that may provide clues to the presence of other anomalies. In the case of the urinary tract, several such clues exist. Two that recently came up for discussion are spontaneous pneumothorax and supernumerary nipples. An incidence of urinary tract anomalies as high as 19 percent has been reported in children with spontaneous pneumothorax as neonates (Bashour, *Pediatrics* 59:1048,1977). Likewise, an incidence as high as 27 percent has been reported in children with supernumerary nipples (*J Peds* 95:274, 1979 and *Pediatrics* 73:103, 1984). While these data are somewhat controversial and firm recommendations regarding investigation of the urinary tract cannot be made, the possible significance of these two entities should be kept in mind, raising a "red flag" to the astute clinician.

From the Department of Pediatrics, Robert Wood MD, Chief Resident in Pediatrics, Children's Medical and Surgical Center; Frank A. Oski MD, Chairman; and Linda Clark, Librarian, Department of Pediatrics, The Johns Hopkins School of Medicine.

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Today's Psychiatry

Food Additives and Behavior

ARNOLD BRENNER MD

"Dr. Jones, my eight-year-old boy, you know, the one you sewed up twice last year, is having trouble in school. He can't sit still, gets distracted easily, and has a short fuse at home. The teacher says he might have an attention deficit disorder and might need medicine, but my hairdresser says that a natural diet could be helpful. What do you think?"

In 1975, Dr. Ben Feingold, a pediatric allergist, claimed in his controversial book, *Why Your Child is Hyperactive*,[1] that half the hyperkinetic child population could be controlled by change in diet. Feingold excluded from his diet the almost 3,000 additives, preservatives, artificial colors, and flavors in the modern American diet. Also excluded were certain foods containing "salicylates," including some fruits and vegetables.

The claim was based on Feingold's clinical experience. A number of vigorous double-blind controlled studies have been made and reviewed[2] to test the Feingold hypothesis. In these studies, 2 to 30 mg of a mixture of eight or less synthetic food dyes were used as a challenge. The observers noted that a few children reacted adversely to synthetic food dyes. It was concluded at a conference held at the National Institute of Health[3] that some children may benefit from the additive-free diet but not the larger number claimed by Feingold.

A major weakness, probably invalidating the above studies and explaining the discrepancy, is the low dosage of additives used in the studies. This was based on the Nutritional Foundation's estimate that the per capita daily consumption of food colors was 26 mg. Subsequently, the FDA found that the average six-to twelve-year-old child consumes 76 mg per day of food colorings. Swanson and Kinsbourne,[4] after giving a standard 25 to 30 mg dose of additive and finding limited reactivity, later challenged a group of children to 100–150 mg of synthetic colors. There was clear and unequivocal deterioration in attention span and increase in hyperkinesis in a double-blind protocal.

A second weakness of the original studies is the limited number of additives included. When the full diet is used, excluding all additives, several less-well-controlled clinical trials under "battlefield" conditions have shown impressive benefits. In one study of 59 hyperkinetic children,[5] a third of the children who could adhere to the diet dramatically improved. Only 2 of 27 who could not participate in the diet spontaneously improved over the six months the children were observed. Some of the children who responded had not benefitted from any other mode of therapy. Chocolate, not excluded in many of the vigorous studies,[6] caused hyperkinesis in some children. Another study demonstrated that some children not considered to have attention deficit disorder benefitted from the diet.[7]

In the most definitive double-blind, crossover, placebo-controlled study reported in *Lancet*, 62 of 76 hyperactive children responsed to a diet limited to lamb, turkey, bananas, apples, cabbage, carrots, rice, and potatoes. Twenty-one children reverted to completely normal behavior. The most frequent hyperkinesis-provoking agents were colors and preservatives (79 percent), but other foods, including soy, milk, grapes, wheat, and oranges, were also precipitating agents.[8] This supports not only the additive hypothesis but also the concept of "allergy, tension, fatigue syndrome," in which certain commonly ingested foods may provoke behavioral changes in biochemically susceptible children.[9]

Specific additives have been shown to cause behavioral changes in laboratory animals, and neurotransmitter effects have been documented *in vitro* with studied additives. The diet mandates a decrease of simple sugars, benefitting some children.[5] Trace-mineral metabolism may be involved.[10] Much research has to be done.

The practicing physician is left to make therapeutic decisions based on incomplete information. Behavioral and educational adjustments are somewhat helpful. The stimulant drugs Ritalin, Dexedrine, and Cylert are frequently used, but other psychotrophic drugs, such as Mellaril, the antidepressant tricyclics, and MAO inhibitors are used for some patients. Dietary modification appears to be helpful for a group of the attention deficit disorder population. At present, there is no way to define who will respond to diet therapy, and like Ritalin, a trial of therapy is the only true test of effectiveness.

Pragmatically, the diet may be difficult and time-consuming for both physician and parent. Many children cheat on their diet. The family must be motivated, and when parents see a dramatic change, they become enthusiastic. Some parents, highly resistant to the use of medication, will agree to a trial of Ritalin when alternative therapies have been unsuccessful.

A self-help parent group, The Feingold Association of Northern Maryland [2203 Springlake Drive, Timonium, MD, 21093 (301-661-0044)] have invaluable menu plans, recipes, and safe food lists available. The association also has meetings for parents and supports a summer camp for responding children.

Adults going on the restricted diet are said to benefit. Anecdotally, adult attention deficit disorder, narcolepsy, migraine, sleep apnea syndrome, and varied behavioral disorders are said to improve in some people. Unlike the study of children, there is no good data available on adult reactions.

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

The physician caring for a child known to be a Feingold diet responder must be certain to avoid most of the standard pediatric preparations. Uncolored and unflavored adult medications may be divided and crushed in a suitable food, such as applesauce. Children not completely responding may require lesser doses of Ritalin.

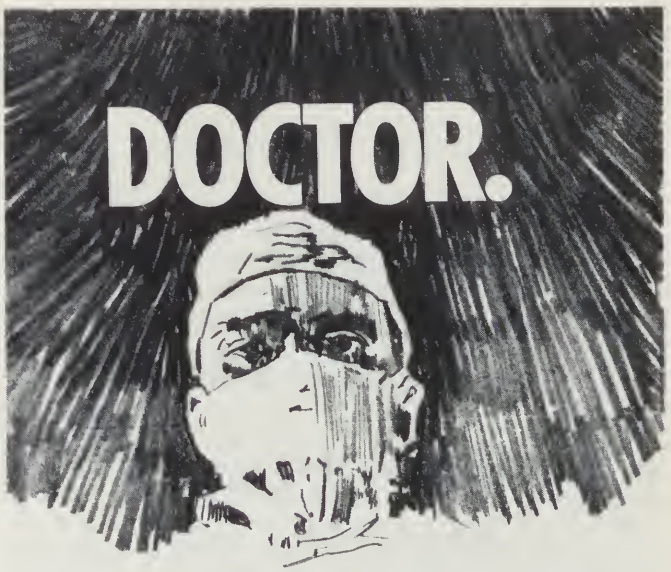
Some children may be so chemically sensitive that contact with odors and solvents may precipitate hyperkinesis. A physician's open attitude and encouragement are helpful for patient compliance.

References

1. Feingold, B.F. *Why Your Child Is Hyperactive.* New York: Random House, 1975.
2. *The National Advisory Committee on Hyperkinesis and Food Additives, Final Report to the Nutrition Foundation,* The Nutrition Foundation, 489 Fifth Avenue, New York, NY 10017, October 1980.
3. Consensus Development Conference Statement. "Defined Diets and Childhood Hyperactivity." National Institute of Health: Bethesda, MD, January 1982.
4. Swanson, J.M. and Kinsbourne, M. "Food Dyes and Impairment of Performance in Hyperactive Children." *Science* 211(1981):410–11.
5. Rimland, B. "The Feingold Diet: An Assessment of the Reviews by Mattes, by Kavale and Forness, and Others." *J Learning Disabilities* 16(1983):331–33.
6. Brenner, A. "A Study of the Efficacy of the Feingold Diet on Hyperkinetic Children." *Clin Pediatr* 16(1977):652–56.
7. Holborow, P.; Elkins, J.; and Berry, P. "The Effect of the Feingold Diet on Normal Schoolchildren." *J Learning Disabilities* 14(1981):143–47.
8. Egger, J.; Carter, C.M.; Graham, P.J.: *et al.* "Controlled Trial of Oligoantigenic Treatment in the Controlled Trial in the Hyperkinetic Syndrome." *Lancet* (1985):540–45.
9. Crook, W.G. "Food Allergy; The Great Masquerader." *Pediatr Clin North America* 22:227–37.
10. Brenner, A. "Trace Mineral Levels in Hyperactive Children Responding to the Feingold Diet." *J Pediatr* 94(1979):944.

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One Minute with Diabetes

Doctor, I have been concerned about the possibility of hypoglycemia during sexual intercourse. This concern is reinforced by some general publications supplied to diabetic patients suggesting that intercourse should be considered a strenuous activity and be preceded by a carbohydrate snack. How long before intercourse should I eat and what foods should I eat at that time?

It is true that general publications for diabetic patients recommend some carbohydrate intake before strenuous activity. The author could find no literature in which the hypoglycemic effect of sexual intercourse was studied until the advent of self-monitoring of blood glucose. Since the popular use of self-monitoring of blood glucose many of these legendary statements can be studied easily.

Doctors Moses and Colagiuri of Wollogong, Australia recently evaluated 16 patients (5 men and 11 women) who reported 34 acts of intercourse. The average age was 39 years, the average duration of the diabetes 12 years, and all had insulin-dependent diabetes. All intercourse took place in the evening. The blood glucose level before intercourse was 117 ± 50.4 mg/dl and after intercourse, 110 ± 46 mg/dl. This difference was not significant. However, the blood glucose level did fall with intercourse in 27 of the 34 cases.

The popularity of the blood glucose meters makes studies of this kind possible. Although the definition of strenuous activity will vary widely, blood glucose testing will give specific guidance as to when supplemental carbohydrate snack is or is not needed. To consider intercourse a strenuous activity that should be preceded by a carbohydrate snack does not appear to be good advice any longer.

DeWITT E. DeLAWTER MD

Insurance Monitor

OB/GYN Survey Results

A survey conducted by the American College of Obstetricians and Gynecologists (ACOG) showed that 12 percent of those responding dropped obstetrics because of the threat of malpractice suits. Of those physicians who stopped practicing obstetrics, more than half stopped between the ages of 35 and 54, and 25 percent stopped before the age of 45.

The survey also found that the average insurance premium for OB/GYNs nationally is $20,800. Approximately 27 percent of OB/GYNs pay $25,000 or more for their insurance, nearly triple the 9.4 percent paying that much in 1983.

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Missouri Tort Reform

Under a bill recently signed into law, noneconomic awards for medical malpractice cases in Missouri will be limited to $350,000. Noneconomic damages include pain, suffering, mental anguish, disfigurement, physical impairment, and loss of capacity to enjoy life.

In an effort to eliminate frivolous malpractice suits, the new law also requires plaintiffs to submit an affidavit from a medical expert within 90 days after a suit is filed, stating there are reasonable grounds to believe that malpractice occurred. If an affidavit is not submitted in 90 days, the case will be dismissed without prejudice. Under the provision, the plaintiff would be able to file suit again with no financial penalty.

Connecticut Physicians Changing Practice Patterns

A poll of 2,500 Connecticut physicians by the state medical society found that 28 percent of the physicians have had at least one malpractice suit filed against them since 1980. Seventy-seven percent of the physicians reported that they now order more diagnostic tests than they previously would have, 81 percent were more likely to call in specialists for consultation, and 83 percent said they spend more time talking with patients and explaining treatments. The poll also found that nearly 30 percent of the physicians have cut back on their service to patients.

• • •

Tort Reform Summary

According to the American Medical Association, nine states have passed legislation limiting malpractice awards, ten states limit lawyers' fees, 17 specify that large payments to plaintiffs be made periodically instead of in lump sums, and 16 have abolished the collateral-source rule that prevents juries from learning of a plaintiff's other sources of medical payments, such as insurance or disability payments.

• • •

For more information or answers to your insurance questions, contact your insurance representative.

Medical Miscellany

Subjects Needed for Allergy Study

Children aged 6 to 14 and adults aged 20 to 40 are being sought by Johns Hopkins physicians to participate in an allergy study. If you have hay fever, asthma, or both, and are not currently receiving allergy shots, you may be eligible to take part in this one-year study. If selected, you will receive a free allergy evaluation and free allergy shots. If interested, call 301-532-4137.

• • •

Volunteers Sought for Ragweed-Asthma Study

Do you have asthma during the hay fever season? If so, you may be eligible to participate in a study conducted by Johns Hopkins allergists, who are trying to find out if allergy shots can help you and others like you with allergic asthma. If you are between 16 and 60 years old, and have seasonal asthma triggered by ragweed, you may qualify. You will receive free medication and evaluations, and will be reimbursed for expenses. If interested, please call 301-532-4127.

• • •

Awards Recognize Outstanding Media Journalism

The Medical and Chirurgical Faculty of Maryland announced the winners of the First Annual Media Awards for excellence in medical journalism during the 1986 Annual Meeting last month. The best entry in each of three categories, radio, television, and print, received a plaque and a $1,000 cash donation to the medical charity of the winner's choice.

Jon Franklin of *The Evening Sun* received top honors in the print category for his 10-part series, "Brave New Heart: A Transplant Patient's Story." Franklin spent six months on the project interviewing health care professionals, researching the history and techniques of heart transplants, and selecting and gaining the trust of a patient from the Johns Hopkins Hospital's list of transplant candidates.

WMAR-TV's Jack Bowden received the award of excellence in the television category for his three-part series, "Turning Back The Clock." Bowden wrote and produced the reports, which examined the techniques used by many Americans to look and feel young.

A 30-minute documentary, "Shock Trauma: The Golden Hour," by Michael Summers of WFBR-AM placed first in the radio category. The documentary consists of a series of edited interviews with the people who run the Maryland Institute for Emergency Medical Services Systems (MIEMSS). Listeners were taken on an "audio tour" of the entire system.

The following entries were recognized with Citations of Merit:

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PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of the State of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to the Physician Placement Service, 1211 Cathedral St., Baltimore, MD 21201; telephone 1-301-539-0872.

Physicians wishing to locate in Maryland are invited to submit a resumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities which might be available in Maryland.

Journal announcements on the Classified Advertising page for Physician Placement Service are charged at the regular Classified Advertising rate.

Print: Sue Miller, *The Evening Sun*, "Medical Beat" column
Patrick Gilbert, *The Evening Sun*, "Criminal Insanity" series
Mary Knudson and Scott Shane, *The Baltimore Sun*, "Aids: More Answers, More Questions"
Carol Ukens, *The Messenger* and *The Towson Times*, "Children in Trauma"
Ray Feldman, *The Towson Times*, "Beyond the Verdict: A Rape Victim's Lawsuit Raises Troubling Questions"

Television: Tobie Marsh, WMAR-TV, "Facts About Aids"

Entries were judged by a panel representing the print and broadcast fields as well as three physicians and were rated on the basis of medical accuracy, significance, quality, public interest, impact, depth of coverage, and journalistic style. The panelists were William A. Cassidy MD, Chairman of the Media Awards Subcommittee; James E. Bell MD, Chairman, Med-Chi Public Relations Committee; James G. Zimmerly MD, JD, MPH, Editor, *Maryland Medical Journal*; Ann Wintriss, Managing Editor, *Maryland Medical Journal*; Ginger Mudd Galvez, Baltimore writer; and Irene Shipman PhD, Chairperson, Department of Mass Communications, Towson State University.

The Media Awards Program was designed with a dual purpose: first, to recognize medical journalism that contributes to a better public understanding of health and medicine in Maryland and Washington, DC. The second goal of the Program is to expand the Faculty's contacts with the media and to emphasize to reporters the importance of delivering accurate, quality health information to the public. As part of the Faculty's Public Relations Plan for 1985-86, the awards competition provided Med-Chi with an opportunity to encourage the media to use the medical society as a resource for health information in the future.

Based on the overwhelming success of the first media awards competition, plans are under way to launch a Second Annual Media Awards Program to honor work published or broadcast during 1986.

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EDS National Foundation

Sufferers from Ehlers Danlos Syndrome have a congential defect in the structure of their connective tissue. The Ehlers Danlos National Foundation (EDNF) was organized to provide knowledge, understanding, and support to those who suffer from EDS and to their families. It is also the desire of the EDNF to further educate all medical professionals about EDS and related connective tissue disorders through programs in Medical and Nursing schools, seminars, brochures, updated articles, personal accounts, and a newsletter. Although there is no cure for EDS, early diagnosis and proper treatment of the "symptoms" are imperative to the physical and mental well-being of the victims and their families.

EDNF is registered with the National Center for Education in Maternal and Child Health; with the National Information Center for Orphan Drugs and Rare Diseases; and with the National Referral Center/ Library of Congress—all located in Washington, DC. For more information contact Nancy Hanna, Executive Director, Ehlers Danlos National Foundation, P.O. Box 1212, Southgate, MI 48195 (313-282-0180).

• • •

Authorization and Assignment Form

The frequent interaction between attorneys and physicians often gives rise to frictions and disputes, particularly in the area of obtaining medical reports and in litigation. To attempt to prevent and resolve these professional differences, the Medicolegal Committee exists, jointly sponsored by the Maryland State Bar Association, the Baltimore City Bar Association, and the Maryland Medical-Chirurgical Faculty, consisting of twelve attorneys and twelve physicians.

The Committee has now formulated a form of "Authorization and Assignment" for use in refining the relationship among the patient-client/attorney/physician, which is reproduced on the following page. This form was approved by the Maryland State Bar Association in June 1985, by the Baltimore City Bar Association in September 1985, and by the Maryland Medical-Chirurgical Faculty in November 1985.

Doctor, Planning to Relocate?

If you are moving or planning to, please let us know so that you won't miss a single issue of the **Journal.** Just fill out the form below and mail it to: Doris Cicchini, **Journal,** 1211 Cathedral St., Balto., MD 21201.

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Telephone: .....

IMPORTANT: Date Effective: .....

Signature: ..... Date: .....

Date: _____

TO: _____

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AUTHORIZATION AND ASSIGNMENT

You are hereby authorized to disclose and/or furnish my attorneys, _____,
Address: _____,
any and all medical information, bills, and records in your possession which they request in reference to all illnesses and injuries suffered by me (my wife/husband) (children) including, but not limited to, the injuries which were sustained on _____ 19 __.

I further, irrevocably assign to you, and authorize and direct said attorneys to pay from the proceeds of any recovery in may case all reasonable fees (unless otherwise limited by law) for health care services provided by you as a result of the injury or condition sustained on said date. I understand that this in no way relieves me of my personal primary responsibility to pay for such services and that the signing of this form does not prohibit customary billing by you. Further, nothing in this agreement shall be construed to waive my obligation to forward payment for health care services from all or any portion of any first party insurance collected for medical services which are the subject of this authorization.

It is further understood that the statute of limitations in this State is three (3) years from the time said services were last performed and I further understand that because of long delays in trial dockets, many cases are not tried or settled until a date which is beyond the three (3) years after the last service was performed. In view of this, I hereby agree that the statute of limitations with respect to any claim for fees for services mentioned above will not begin to run until there is a denial in writing by me of any balance claimed to be due and owing to you by me.

I further authorize my attorneys upon request of the undersigned physician to notify you of any substantial change in the status of the cause of action related to the illness or injuries described above which would affect my ability to pay for the health care services rendered. I further authorize and direct the above-named attorneys to notify you should their representation of my interests in connection with the illnesses and injuries referred to hereinabove be terminated for any reason.

Notice to Patient—By signing this form, you give up certain of your legal rights. You should discuss this with your attorney before signing.

Name: _____

Address: _____

_____

_____

Relationship to Patient: _____

Witness: _____

Date: _____

The undersigned attorney for the patient referred to above hereby agrees to comply fully with the foregoing "Authorization and Assignment" and agrees to advise the named assignee of the status of the claim of the patient promptly following a request by the health care provider.

Attorney Signature: _____

Date: _____

The undersigned physician for the patient referred to above agrees that he will not demand payment for his services to this patient until the legal claim of the patient is concluded by settlement, trial or otherwise, and that, upon request of the patient's attorney, he will cooperate in promptly providing medical information, reports, and bills, and in providing his testimony through deposition and/or trial, as may be reasonably required by the case.

Physician Signature: _____

Date: _____

Approved by:
Maryland State Bar Assn—June 1985
Baltimore City Bar Assn—September 23, 1985
Maryland Medical-Chirurgical Faculty—November 1985

Executive Committee and Council Actions

Executive Committee—March 5, 1986

Conference Call

The Executive Committee discussed the issue of licensure for Physician Assistants (PAs), HB 976, SB 948, and HB 1638. Present were members of the Executive Committee and Drs. Bernard Tabatznik, Arthur T. Keefe, and C. Earl Hill.

Dr. Keefe and Dr. Hill explained many reasons for the Board of Medical Examiners' opposition to licensure of PAs, including possibility of independent practice and independent payment, and scope of practice issues that more properly belong in regulation. Dr. Keefe requested Faculty support for HB 1638 providing for registration of PAs.

Dr. Tabatznik, Chairman of the Med-Chi standing Committee on Physician Assistants, spoke in support of HB 976 and SB 948 proposed by the Physician Assistants. His understanding is that PAs are dependent practitioners and intend to remain so, but they desire statutory recognition and a legislatively mandated scope of practice.

After discussion of issues and points of view represented, the Executive Committee gave unanimous support to the position of the Board of Medical Examiners in opposing licensure for Physician Assistants, to support Maryland certification for Physician Assistants, and to encourage development of a satisfactory scope of practice.

The Library Page

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided by Med-Chi members during February 1986.

	No. of Citations
1. Agranulocytosis mortality	12
2. Capgras syndrome	36
3. Cough syncope	13
4. Laboratory animals and ethics	19
5. Lung neoplasms and lasers	25
6. Myelofibrosis	18
7. Pervasive child development disorders	31
8. Treatment and prognosis of Hodgkin's disease	24
9. Treatment of hydrofluoric acid burns	15
10. Vision tests and the mentally retarded	19

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

SUSAN E. HARMAN
Reference and Circulation Librarian

Medical and Chirugical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian



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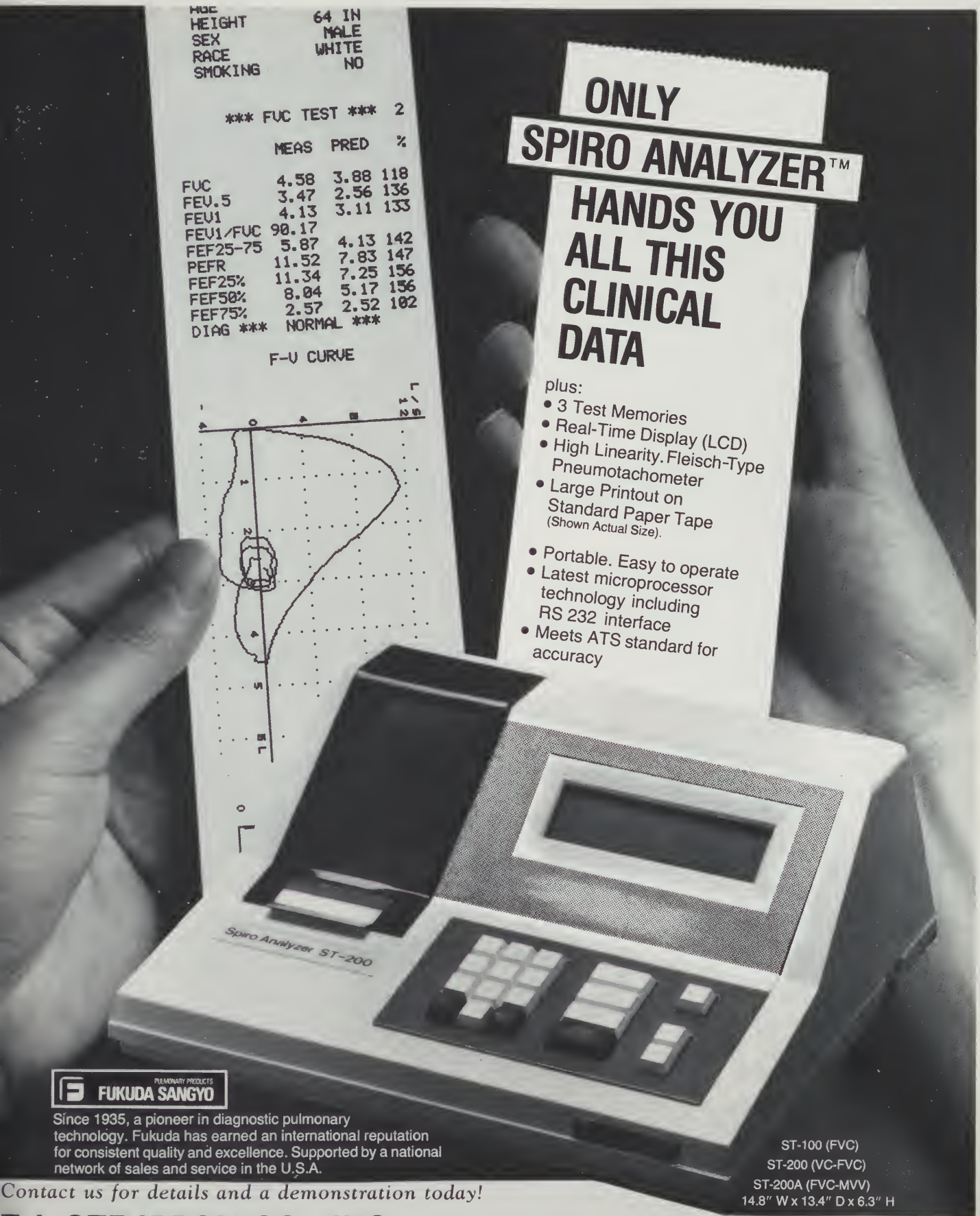
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Specifications

Manuscripts must be original typed copy, double-spaced throughout (including text, case reports, legends, tables, and references) with margins of at least one inch. Number pages consecutively. Please submit two additional copies.

Include in the manuscript the concise title, full name of the author (or authors) with highest degree, academic and professional titles, affiliations, and any institutional or other credits.

An introductory synopsis/abstract of approximately 100–150 words is required.

Tables are to be typed on separate sheets ot paper, numbered, and have a brief descriptive title. The Editor reserves the right to edit tables. Be sure that statistics are consistent in both tables and text.

References are limited to those citations noted in the text. References are to be typed double-spaced and numbered consecutively as they appear in text. They will be examined critically at the time of review and must be kept to a minimum. The number of references is generally limited to 20 in major contributions and fewer in shorter articles. Exceptions may be made if appropriate in the opinion of the reviewing editor. Personal communications and unpublished data should not be included. The following are necessary: names of all authors, complete title of article cited (lower case), name of journal abbreviated according to *Index Medicus*, volume number, first and last page numbers, and year of publication. For more extenisve information about preparing medical articles for publication, the editors suggest the International Committee of Medical Journal Editors: Uniform requirements for manuscripts submitted to biomedical journals. The complete document is available in the June 1982 issue of the *Annals of Internal Medicine*.

Illustrations are material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper. *Omit illustrations that do not increase understanding of text, and limit them to a reasonable number.* Four or fewer illustrations should be adequate for a manuscript of 4 to 5 typed pages. Legends are to be typed on a separate sheet of paper. Type on a gummed label and affix to the back of each illustration: figure number, title of manuscript, name of senior author, and arrow indicating top. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs and drawings. *Cost of printing color* photographs must be borne by the author.

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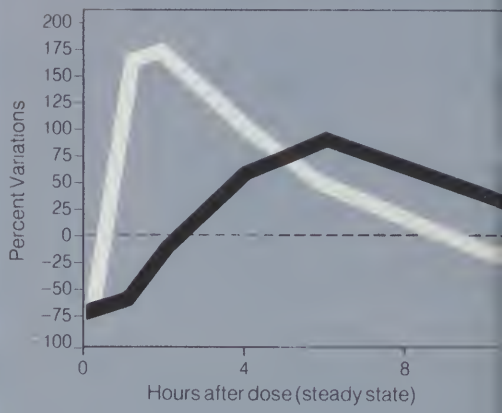
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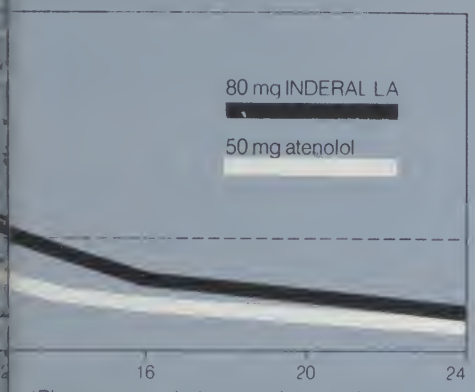
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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULARS.)*

INDERAL® LA Brand of PROPRANOLOL HYDROCHLORIDE **(Long Acting Capsules)**
INDERIDE® LA Brand of PROPRANOLOL HYDROCHLORIDE (INDERAL® LA) and HYDROCHLOROTHIAZIDE **(Long Acting Capsules)**
INDERAL LA AND INDERIDE LA Capsules should not be considered simple mg-for-mg substitutes for INDERAL and INDERIDE Tablets. Please see package circulars.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

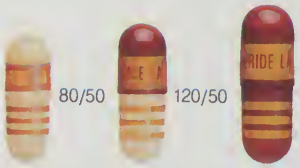
DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Once-daily INDERIDE® LA

Each capsule contains propranolol HCl (INDERAL® LA), 80 mg, 120 mg, or 160 mg, and hydrochlorothiazide, 50 mg



The appearance of these capsules is a registered trademark of Ayerst Laboratories.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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REFERENCES

1. Data on file, Ayerst Laboratories. **2.** Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321-1323. **3.** Sumiye L, Vivian AS, Frisof KB, et al: Potassium loss associated with hydrochlorothiazide versus chlorthalidone. *Clin Ther* 1981;4:308-320. **4.** Ram CVS, Garrett BN, Kaplan NM: Moderate sodium restriction and various diuretics in the treatment of hypertension. *Arch Intern Med* 1981;141:1015-1019

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Motrin® 800 mg TABLETS
ibuprofen



Extra strength
Convenience
Economy

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A Century of Caring
1886·1986

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J-6138 January 1986

"High blood pressure should be a red flag to screen for cholesterol..."[1]



Wyeth Laboratories
Philadelphia, PA 19101

If your patients have hypertension, they probably have high cholesterol too.

The Framingham Heart Study[2] showed that over two thirds of the 35 and older population in that study with systolic blood pressures over 145 mmHg also had serum cholesterol levels of 225 mg/dL or more, and 46% had levels above 250 mg/dL.

While many clinical laboratories still report 250 mg/dL as "normal" cholesterol, the NIH Consensus Development Conference Statement on Cholesterol and Heart Disease[3] stated that any level above 220 mg/dL is associated with a significantly increased risk of coronary heart disease.

You need to know, because high cholesterol parallels high blood pressure as a CHD risk factor.

Epidemiological studies and large-scale prevention trials have indicated that as with blood pressure, serum cholesterol levels are proportionately related to CHD risk. Specifically, *"...for every 10 mmHg rise in pressure, there appears to be about a 30% rise in cardiovascular risk."*[4] *"...for every one percent you go up the American cholesterol scale, your subsequent rate of heart attack rises two to three percent."*[5]

And although the specific impact on CHD has not been determined, we know that many of the principal agents used to lower blood pressure actually increase cholesterol.

Wytensin® lowers blood pressure effectively without raising cholesterol.

While Wytensin is not a cholesterol-lowering agent and is not indicated for the treatment of hyperlipidemia, in controlled clinical trials[6] it caused a slight, sustained decrease in total cholesterol without reducing the HDL fraction or altering serum triglycerides.

At the same time, Wytensin lowered blood pressure as effectively as hydrochlorothiazide, propranolol, clonidine or methyldopa. Drowsiness and/or dry mouth, the most frequent side effects noted with Wytensin, usually diminish or disappear over time. In fact, in double-blind studies to date, discontinuance of therapy for all side effects occurred in about 13% of patients.

Wytensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol



See important information on following page.

References: 1. Glueck CJ. Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*. Washington, D.C., March 31, 1985. 2. *The Framingham Study. An epidemiological investigation of cardiovascular disease*, Section 28, U.S. Dept. of Health, Education, and Welfare. 3. National Institutes of Health Consensus Development Conference Statement, 1984 Vol 5, No 7, p 4. 4. Chobanian AV: The influence of hypertension and other hemodynamic factors in atherogenesis. *Progress in Cardiovascular Diseases, XXVI* (3) 177, Nov/Dec, 1983. 5. Castelli WP: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 6. Data on file, Wyeth Laboratories.

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WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic.

Contraindication: Known sensitivity to the drug.

Precautions: 1. Sedation: Causes sedation or drowsiness in a large fraction of patients. When used with centrally active depressants, e.g., phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2. Patients with vascular insufficiency: Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure. 3. Rebound: Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology.

INFORMATION FOR PATIENTS: Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy. Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly.

LAB TESTS: In clinical trials, no clinically significant lab test aboormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction. In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS: **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e.g., digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials. However, potential for increased sedation when given concomitantly with CNS depressants should be noted.

DRUG/LAB TEST INTERACTIONS: No lab test abnormalities were identified with **Wytensin** use.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e., about 10 times maximum recommended human dose. In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes. No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture. In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY: Pregnancy Category C: WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN: A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg. These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits. However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg). Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg. There are no adequate, well-controlled studies in pregnant women. **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus.

NURSING MOTHERS: Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE: Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S. and is based on data from 859 patients on **Wytensin** for up to 3 years. There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b.i.d.

Adverse Effect	Placebo (%) n = 102	Wytensin (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial. Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time. In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20%. Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less: Cardiovascular—chest pain, edema, arrhythmias, palpitations. Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort. Central nervous system—anxiety, ataxia, depression, sleep disturbances. ENT disorders—nasal congestion. Eye disorders—blurring of vision. Musculoskeletal—aches in extremities, muscle aches. Respiratory—dyspnea. Dermatologic—rash, pruritus. Urogenital—urinary frequency, disturbances of sexual function. Other—gynecomastia, taste disorders.

Drug Abuse and Dependence: No dependence or abuse has been reported.

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years. Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both. Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic. Vital signs and fluid balance should be carefully monitored. Adequate airway should be maintained and, if indicated, assisted respiration instituted. No data are available on **Wytensin** dialyzability.

Dosage and Administration: Individualize dosage. A starting dose of 4 mg b.i.d. is recommended, whether used alone or with a thiazide diuretic. Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response. Maximum dose studied has been 32 mg b.i.d., but doses this high are rarely needed.

How Supplied: (guanabenz acetate) Tablets, 4 mg, bottles of 100 and 500; 8 mg and 16 mg, bottles of 100.

Revised 2/14/85

Wyeth Laboratories
Philadelphia Pa 19101

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Ad Council

TWELVE IMPECCABLE EXCUSES FOR NOT GIVING BLOOD.

"1. I think I have lumbago.
2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
5. I just got back from Monaco.
6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia."



Each one's a doozy, but we're hoping you won't use any of them. Give blood through the American Red Cross. Please, don't chicken out.

EXCUSES DON'T SAVE LIVES. BLOOD DOES.

American Red Cross

AIDS Update

VICTOR GONG MD; GABOR D. KELEN MD, FRCP(C); and KEITH SIVERTSON MD

AIDS was first reported in 1981[1] as a unique and newly recognized syndrome characterized by severe immunodeficiency, opportunistic infections, and rare malignancies in previously healthy persons. Since its initial description AIDS has become a major public health problem in the United States, and it appears that it will be an equally challenging dilemma abroad. AIDS undoubtedly ranks as one of the most serious epidemics to confront modern medicine, and it is now a commonly encountered clinical problem, especially in urban epicenters with large populations of homosexuals and intravenous drug abusers.

From the Department of Emergency Medicine, The Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21205.

The acquired immunodeficiency syndrome (AIDS) occurs among certain high-risk groups: homosexual and bisexual men, intravenous drug abusers, hemophiliacs, sexual partners of all the aforementioned groups, and infants of women in at-risk groups. The small but significant number of cases reported in individuals not belonging to any defined risk groups[2] has prompted alarm among scientists that AIDS may be spreading to other segments of the population.

During the last four years, over 16,000 cases of AIDS have been diagnosed in the United States.[3] Development of a screening test for detection of antibodies to the AIDS virus[4] provided a valuable tool for epidemiologists to study the natural history and progression of the disease.[5] While it is impossible to give a precise figure on the number of infected individuals in this country, estimates are that potentially over 400,000 persons have been exposed to the virus.[6]

New and Revised Definitions

The Centers for Disease Control (CDC) in 1981 defined the acquired immune deficiency syndrome (AIDS) as a disease characterized by opportunistic infections and malignancies in patients without a known cause for immunodeficiency.[1,7] The shortcomings of this definition have become apparent to many clinicians and epidemiologists. AIDS is a wide clinical spectrum of diseases including at least the following three entities: (1) overt AIDS as defined by the CDC surveillance definition, (2) immunologic abnormalities in otherwise asymptomatic individuals,[8] and (3) a condition termed the lymphadenopathy syndrome, AIDS prodrome, or AIDS-related complex (ARC) characterized by unexplained chronic lymphadenopathy, nonspecific constitutional symptoms, and *in vitro* immunologic abnormalities.[9–12]

As a consequence of HTLV-III antibody testing, physicians will be faced with patients found to have positive serology for the etiologic AIDS virus. Some patients will be HTLV-III antibody positive on routine blood donor screening. The progression of these asymptomatic patients to overt AIDS is unknown at present. Another larger group of individuals will have serum antibodies to HTLV-III and have the ARC as well. ARC patients were of special interest to investigators because they were thought to represent a subset of patients who are prodromal for the overt AIDS. For a characteristic to be prodromal, it must be identified consistently in all patients progressing to overt AIDS. However, not all AIDS patients have passed through a recognizable prodromal stage. Abrams *et al.* have studied 200 homosexual men with ARC since 1981 over a 40-month period, and report 10 percent of them progressing to AIDS.[13] Other studies report that 5 percent to 15 percent of ARC patients will later develop opportunistic infections characteristic of AIDS.[9,11,12,14]

Epidemiology Update

Risk Groups and Demography The CDC's latest surveillance data[3] show as of January 13, 1986 there were 16,458 reported cases of AIDS (16,227 adults and 231 children) in the United States. The mortality continues to be high; 51 percent of all adult and 59 percent of all pediatric cases have died. Among adult AIDS patients, there has been no significant change over time in distribution by age, race, and sex. The proportion of AIDS cases in transfusion recipients has increased significantly, although these cases still contribute less than 2 percent of the total. Haitian-born AIDS patients have now been placed into the "other/unknown" risk group because of new epidemiological information that suggests both heterosexual contact and exposure to contaminated needles play a role in disease transmission. *Pneumocystitis carinii* pneumonia (PCP) continues to be the most common opportunistic infection reported among AIDS patients; diagnosed in 63 percent of all AIDS patients, followed by 24 percent with Kaposi's sarcoma (KS), and 14 percent with Candida esophagitis.

Pediatric AIDS patients (less than 13 years old) also have not shown significant change in distribution by age, race, sex, and disease presentation over time. Sixty percent are black, 29 percent are Caucasian, and 20 percent are Hispanic. The majority (58 percent) had PCP, followed by 19 percent with disseminated cytomegalovirus, 15 percent with Candida esophagitis, 6 percent with cryptosporidiosis, 4 percent with KS, and

22 percent with other opportunistic diseases. Seventy-two percent of the pediatric patients came from families in which one or both parents had AIDS or were at increased risk of developing AIDS, 14 percent had received blood transfusions, 5 percent had hemophilia, 6 percent had incomplete risk-factor information. The majority of reported pediatric cases (75 percent) resided in New York, New Jersey, Florida, and California.

AIDS Outside High-Risk Groups A small but significant number of cases have emerged among individuals without any known risk factors. The characteristics of these patients have been studied, and the mechanism of transmission is considered to be through sexual contact or parental exposure to blood.[2]

Donors with only mild or inapparent illness are the source of most transfusion-associated AIDS, and their HTLV-III infection may be persistent and asymptomatic for years (an average of 28 months).[2,15] This data support the need for serologic screening of donated blood. Unfortunately, virus-positive persons seronegative for HTLV-III have been reported.[16]

Heterosexual Transmission of AIDS Currently, homosexuals and bisexuals account for 65 percent of all transmitted cases of AIDS in the United States.[3] The predominant mode of heterosexual transmission in the United States (from men to women) accounts for less than 5 percent of the total AIDS cases.[17–19] Extensive spread of AIDS beyond the established risk groups into the general population via heterosexual transmission would require both male to female, and female to male transmission. Recent reports indicate that female to male transmission is occurring in the United States especially via female prostitutes.[12,20,21]

Promiscuous heterosexual activity appears to be the major risk factor for AIDS in Central Africa, with an annual incidence rate of 17 per 100,000.[22] In Zaire and Rwanda, the male-to-female ratio of AIDS is nearly 1:1 indicating that transmission occurs both male to female and female to male. There is also a higher percentage of HTLV-III antibody individuals in the general population of Zaire (estimated at 8 percent to 12 percent) than in the United States.[23]

The Widening Clinical Spectrum

AIDS is a multisystem disease, affecting numerous organs and their physiologic processes. Typically the respiratory, gastrointestinal, and dermatologic systems are involved. This has been reviewed previously.[24] New clinicopathological findings and diagnostic modalities have uncovered pathology among other organ systems as well, and have expanded our understanding of the clinical spectrum of AIDS.

Respiratory Disorders in AIDS The lung is commonly involved by both infectious and malignant processes in patients with AIDS. Data presented at the National Heart Lung and Blood Institute workshop on pulmonary complications of AIDS indicated that of 1,067 patients with AIDS, 41 percent had pulmonary complications.[25] *P carinii* was by far the most common pathogen, followed by *Mycobacterium avium*-intracellulare, cytomegalovirus, and then Kaposi's sarcoma.

Clinical features and radiographic patterns are not specific for these disease entities. Sometimes invasive procedures are warranted to establish a diagnosis. Diagnostic tools include chest roentgenograms, pulmonary function testing, alveolar-arterial oxygen determination, gallium lung scanning, transbronchial lung biopsy, bronchoalveolar lavage, and open lung biopsy.

The value and limitations of chest radiographs will be discussed later in the text. Arterial blood gas measurements may be helpful in assessing the severity of pulmonary involvement. Most commonly hypoxemia is present, while hypocarbia may also be present.[26] Measuring the alveolar minus arterial partial pressure of oxygen with exercise seems to be more sensitive than the determination of partial pressure of oxygen alone.[27] The mean A-a gradient at rest in 159 patients (with subsequently proved *P carinii*) was 47 mm Hg. However the specificity of such a test was not determined by the investigators.[25] Other investigators also have confirmed the utility of a widened (A-a) gradient in predicting the presence of *P carinii* pneumonia in AIDS patients.[26]

Pulmonary function abnormalities are not specific for any disease process. *P carinii* pneumonia most consistently caused findings including: reduction in vital capacity and total lung capacity, increased expiratory flow rates, and a reduced single-breath diffusion capacity for carbon monoxide (Dco).[25,27] The Dco measurement is highly sensitive, although not specific for the diagnosis of *P carinii* pneumonia. However intravenous drug abusers without AIDS also may have a reduction in the Dco.[28]

Gallium lung scans have been used to detect a wide spectrum of pulmonary infections and neoplasms. It is a sensitive although, again, nonspecific test for the presence of *P carinii* pneumonia in AIDS patients.[28–30]

Fiberoptic bronchoscopy with transbronchial lung biopsy is a highly valuable procedure in diagnosing the pulmonary complications of AIDS. The overall yield from these procedures is high (72 percent to 91 percent) and varies with the pathogen.[25,27] Fiberoptic bronchoscopy is not a satisfactory procedure for the diagnosis of Kaposi's sarcoma of the lung.[27]

The yield of infectious diagnoses from bronchoalveolar lavage (BAL) alone is high and in combination with transbronchial biopsy can provide results of as high as

90 percent.[31,32]

Open-lung biopsy is the most invasive of procedures outlined and offers a higher yield in patients with pulmonary Kaposi's sarcoma than do the other modalities.[27]

A series of diagnostic algorithms planning a logical approach for the evaluation of AIDS or suspected AIDS patients with pulmonary complications is summarized by Hopewell and Luce.[27]

Neurological Disorders in AIDS A great variety of neurological manifestations and pathological conditions occur in AIDS patients (Table 1). Ten percent to 39 percent of AIDS patients present with neurological complications.[33–36] These figures probably represent an underestimation of the occurrence of neurological sequellae in AIDS patients, since a series of autopsies on unselected AIDS patients revealed 73 percent with pathological abnormalities.[36]

Physicians must be alert to any neurological complaint among individuals at risk for AIDS, regardless of its nonspecific nature (headaches, confusion, dementia, disorientation, paresthesias).[35] These neurological manifestations can easily be mistaken for metabolic or psychiatric illness, or overlooked among the numerous opportunistic infections and complications in patients with this syndrome. The most common neurological complaints are headache and fatigue,[37] but in one large study, dementia was the most frequent reason for neurological consultation.[38]

The most frequently presenting central neurological syndromes include subacute encephalitis,[34,36] *Toxoplasma gondii* infections,[34–36,39–41] asceptic meningitis[35,36,42] and *Cryptococcus neoformans* infections.[34,36,39] Less frequent etiologies included progressive multifocal leukoencephalopathy,[34–36] herpes simplex encephalopathy,[36] *Candida albicans* infections,[35,36] aspergillus and other bacterial pathogens.[34–36] Recent evidence for the HTLV-III virus infecting human brain tissue was demonstrated by isolation of HTLV-III DNA in the brains of 5 of 15 AIDS patients who presented with encephalopathy.[43]

A summary of the infectious etiologies seen in central neurological complications in AIDS and their clinical features and diagnostic studies are summarized in Table 2, next page.

Cranial neuropathy in AIDS is caused by either infection or tumor.[40] Fungi, mycobacteria, and herpes viruses are potential causes. For varicella zoster virus the cranial nerves most often affected in order of frequency are the fifth, seventh, and third. When tumor is the cause, the clinical syndrome is typical of a carcinomatous meningitis.

Retinal abnormalities in AIDS, including cotton-wool spots, periphlebitis, and chorioretinitis, are due to CMV, toxoplasmosis, and rarely *P carinii*.[44] Both cotton-wool spots and periphlebitis are believed to be the result of an immune complex vasculitis secondary to chronic CMV infection.[44] Neoplasm involving the eye is rare, but Kaposi's sarcoma metastatic to the conjunctival sac has been reported.[44]

Inflammatory polyneuropathy (or Guillain-Barre syndrome) has been reported in AIDS and is believed to be a complication of the herpes virus infections, especially CMV and Epstein-Barr virus.[33] Peripheral neuropathies are more common than the former and present with painful dysesthesias, symmetrical distal sensory loss, absent ankle jerks, and distal atrophy.[34]

Various spinal cord syndromes have been described as a complication of AIDS including infectious and para-infectious myelitis, spinal cord long tract degeneration, and epidural cord compression due to neoplasms.[33,34,45]

Evaluation of these neurologic complications requires a careful history and physical examination. AIDS patients with focal neurologic findings should have CT scans. Focal lesions should be biopsied if they are accessible. Brain biopsy provides a definitive diagnosis.

Patients without focal lesions on CT scan will require lumbar puncture to exclude infections or malignancy. The CSF examination should include cultures for bac-

Table 1. Neurological Complications of AIDS

CNS Infections
- Subacute encephalitis
- Toxoplasma gondii
- Asceptic meningitis
- Cryptococcal meningitis
- Herpes simplex encephalitis
- Progressive multifocal leukoencephalopathy
- Candida abscesses
- Cerebral aspergillosis
- Brain abscesses
- HTLV-III brain infections

Neoplasms
- Primary lymphoma of brain
- Meningeal lymphoma
- Carcinomatous meningitis
- Metastatic Kaposi's sarcoma

Vascular Complications
- Nonbacterial thrombotic endocarditis
- Cerebral infarction
- Cerebral hemorrhage secondary to thrombocytopenia

Other Conditions
- Cranial neuropathy
- Chorioretinitis
- Para-infectious myelitis
- Infectious myelitis
- Peripheral neuropathy
- Radiculopathy
- Focal mass lesions of unknown cause

teria, fungus, virus, mycobacteria, acid-fast bacilli smears, cryptococcal antigen titer and India-ink examinations, cytology, protein, glucose, and cell count.

Evaluation of polyneuropathy and peripheral neuropathy should include metabolic screen, herpes viral titers, cultures of sputum, urine, and blood for CMV, CSF analysis, electromyography, and nerve conduction studies. Patients with peripheral neuropathy may require nerve biopsy to identify the etiology.

Spine films, CT scan of the spine, and myelography are indicated in patients presenting with spinal cord syndromes.

A series of diagnostic algorithms planning a logical approach for the evaluation of AIDS patients with CNS dysfunction and cranial or peripheral neuropathy is summarized by Snyder *et al.*[34] and Levy *et al.*[36]

Gastrointestinal Diseases and AIDS Gastrointestinal manifestations of AIDS are frequent and include a diverse spectrum of opportunistic infections and malignancies such as: oropharyngeal and esophageal candidiasis,[46] cryptosporidia and isopora enteritis,[47,48] cytomegalovirus esophagitis and enterocolitis,[48,49] anorectal herpes simplex virus infections,[50] Mycobacterium avium intracellulare infections,[51] salmonella and campylobacter enteritis,[52] disseminated Kaposi's sarcoma and lymphomas.[53,54] Due to the wide variety of opportunistic pathogens and malignancies that may cause gastrointestinal diseases in the AIDS patient, a comprehensive evaluation consisting of radiographic films,

Table 2. Central Nervous Infections in AIDS

Pathogen	Clinical Features	CSF Analysis	Cultures	Electro-encephalogram	CT Scan (Head)	Other Tests
Subacute encephalitis	Dementia, psychiatric symptoms, confusion, focal motor deficits	Mild pleocytosis Inc. protein Dec. glucose	Sterile	Normal or nonfocal slowing	Normal or cortical atrophy with dilated ventricles	
Toxoplasmosis encephalitis	Frequent in Haitian AIDS patients Focal deficits, confusion, fever, headaches, papilledema, seizures	Normal or mononuclear pleocytosis Inc. protein Dec. glucose Inc. gamma globulin	Sterile	Nonspecific	Ring-enhancing mass lesion(s), hypodense nonenhancing lesion, homogenously enhancing lesion	High titers of IgM-indirect flourescent antibody >1:60 and IgG-indirect flourescent antibody >1:16,000 brain biopsy
Progressive multifocal leukoencephalopathy (PML)	Dementia, personality changes, blindness, aphasia, spasticity, ataxia, dysarthria, hemiparesis	Normal or Inc. protein	Sterile	Irregular, moderate slowing in hemispheres	Hypodense white matter	
Asceptic meningitis	Fever, headache, meningeal signs	Mononuclear pleocytosis, Inc. Protein Normal or Dec. glucose	Culture for Epstein Barr, herpes simplex, cytomegalovirus	Nonspecific	Nonspecific	Fourfold increase in viral serologic titers
Herpes simplex encephalitis	Headache, fever, seizures, aphasia, other focal findings	Mononuclear or polymorphonuclear pleocytosis, Inc. protein, normal glucose	Herpes simplex virus from CSF	Slow or sharp waves in frontal-temporal regions	Nonspecific	Temporal lobe biopsy
Cryptococcal meningitis	Fever, headache, meningeal signs, blindness, cranial neuropathy	Mononuclear pleocytosis, Dec. glucose, Inc. protein	Fungal culture	Nonspecific	Normal or cerebral atrophy or hydocephalus	Inc. CSF antigen titers, India ink test
Candida albicans	Fever, headache, meningeal signs	Lymphocytic pleocytosis Inc. protein, Dec. glucose	Fungal culture	Nonspecific	Usually normal, large abscesses may be detected	

sigmoidoscopy, endoscopy with biopsy if appropriate, and microbiologic studies is indicated.

Renal Disease in AIDS Renal disease has been a recently recognized complication of AIDS. Rao *et al.* demonstrated an association between AIDS-related proteinuria and/or uremia and focal segmental glomerulosclerosis.[55] Pardo *et al.* studied 75 patients with AIDS.[56] Half the patients exhibited proteinuria in excess of 0.5 grams/dl, and 10 percent were in the nephrotic range. Patients with asymptomatic proteinuria had a high frequency of mesangial lesions and mesangial deposits, while those with the nephrotic syndrome had focal and segmental glomerular sclerosis. Episodes of acute renal failure were not uncommon in this population and occurred more frequently in patients with focal sclerosis than those with mild lesions or normal glomeruli. Avoidance and rapid correction of risk factors for acute renal failure (sepsis, nephrotoxic drugs, volume depletion, and the like) may retard or prevent the associated renal complications.[56]

Hematological Disease in AIDS Multiple hematologic abnormalities commonly are found in AIDS patients, reflecting both blood and bone marrow pathology. The most common peripheral blood abnormalities include: a left shift in the granulocyte series, lymphopenia, atypical lymphocytes, and vacuolated monocytes.[57] Other findings include anemia, leukopenia, and thrombocytopenia. Thrombocytopenic purpura has been reported in sexually active homosexual men without evidence of Kaposi's sarcoma or opportunistic infections.[58,59]

The bone marrow pathology in the AIDS patient may manifest as myelofibrosis, increased number of plasma cells, and phagocytic histiocytes.[57] The abnormalities in the blood and marrow may occur early in the course of the illness and in the absence of direct marrow involvement by mycobacteria or fungi, and without opportunistic infection.[12]

Some investigators advocate a bone marrow aspiration and biopsy in every AIDS patient as part of the initial evaluation in light of the early marrow involvement and the potential marrow toxicity of some of the drugs used to treat these patients.[57,60]

Other Diseases of AIDS

Other disease systems reported to be involved include adrenal insufficiency,[61] cardiac Kaposi's sarcoma,[62] nonbacterial thrombotic endocarditis, fibrinous pericarditis, and cryptococcal myocarditis.[63]

Lymph Node Biopsy Patients presenting with fever and lymphadenopathy should be evaluated for infectious, neoplastic, and other causes of lymphadenopathy (Table 3). Indications for lymph node biopsy in these patients are reviewed in Table 4.[13]

Psychiatric Illnesses While medical literature abounds with reports about the clinical and laboratory aspects of the disease, psychiatric issues have largely been ignored. The psychosocial impact of AIDS is magnified by preexisting stigmas, predjudices, racism, and other societal condemnations placed on the groups at risk for AIDS. The devastating impact of a disease that will inevitably be fatal causes many psychological and social reactions, including a loss of self-esteem, changes of body image, feelings of isolation, and sense of loss of control of one's life.[64–66] AIDS patients, not different from other groups with life-threatening illnesses have certain coping mechanisms. They experience a four-stage reaction process characterized by disbelief, denial, bargaining, and acceptance.[64–66]

A recent UCLA psychological study of AIDS discerned two classes of neuropsychiatric syndromes: functional syndromes and organic brain syndromes.[67] The former frequently presented with anxiety states, reac-

Table 3. Differential Diagnosis of Lymphadenopathy in AIDS

Neoplasms
- Kaposi's sarcoma
- Non-Hodgkin lymphoma
- Hodgkin disease

Infections
- Pneumocystis carinii
- Toxoplasma gondii
- Mycobacterium avium intracellulare
- Mycobacterium tuberculosis
- Coccidioides immitis
- Secondary syphilis
- Cytomegalovirus
- Epstein-Barr virus

Other Causes
- Angioimmunoblastic lymphadenopathy
- Angiofollicular hyperplasia
- Lymphadenopathy syndrome (reactive hyperplasia)

Table 4. Indications for Lymph Node Biopsy

- Marked constitutional symptoms in a patient with a negative physical and laboratory evaluation
- Nongeneralized lymphadenopathy (greater than 2 or 3 lymph nodes enlarged)
- Single disproportionate node enlargement
- Cytopenia and or elevated erythrocyte sedimentation rate with a negative evaluation for malignancy or occult opportunistic infections
- Patient or physician reassurance of diagnosis

tive depression versus grief, and suicidal crisis. These symptoms are managed effectively with pharmacologic and psychotherapeutic measures. The organic brain syndromes presenting with delirium and dementia require medical and psychopharmacologic intervention.

All AIDS patients should be thoroughly evaluated for organic causes that may mimic psychiatric syndromes, as already discussed. Most patients will require psychiatric consultation and long-term care. Continuous communication between medical and psychological providers is essential.

Psychiatric symptoms not responsive to pharmacologic doses of appropriate medications should alert the physician to an organic etiology (that is, CNS infection or neoplasm).

The full ramifications of the psychosocial effects of AIDS on its victims are only just being realized. The physician must be aware of the nuances of these psychosocial syndromes to effectively treat all aspects of AIDS.

HTLV-III Antibody Testing

Following the recognition of HTLV-III as the most likely etiologic AIDS agent, the need for a serological assay to detect infection in large numbers of individuals and the protection of our nation's blood supply was a major goal of the U.S. Public Health Service. Enzyme-linked immunosorbent assay (ELISA), has been developed commercially by several major pharmaceutical companies to detect the antibody to HTLV-III. The ELISA testing appears to be both highly sensitive and specific for the detection of HTLV-III antibodies, 98.6 percent and 97.3 percent respectively.[68] This test will be used predominantly to screen donors of blood and plasma products, and in epidemiologic AIDS research. It will supplement, not replace, prior CDC recommendations for the prevention of AIDS.

The extent of HTLV-III Exposure and Outcome When an individual is found to possess antibodies to HTLV-III by the ELISA assay, an additional confirming test (usually the Western blot technique) is performed to exclude a false-positive result. A confirmed positive test indicates that a person has been exposed to the virus and has produced antibodies to that immunologic exposure. That individual may have overt AIDS, be an asymptomatic carrier without any signs or symptoms of AIDS, or have been infected with the virus but developed no clinical disease. Testing for HTLV-III antibodies has yielded variable seropositivity rates among the groups at increased risk and those with active AIDS and ARC (Table 5).[6,14,69,70] The low seroprevalence rate for the virus in Haitian immigrants[6] further supports the CDC's decision to eliminate that category as a group at risk for AIDS. The low seropositivity in heterosexual men and women who are not known members of high-risk groups is encouraging.[6] The recent CDC classification of some AIDS cases as "no known risk category" may be attributed to sexual activity with prostitutes,[2] many of whom use intravenous drugs.[69]

Knowledge of the natural history of infection with HTLV-III is incomplete at present, however the majority of infected adults will not develop clinical manifestations of AIDS in the first few years after infection. Several studies report that 4 percent to 19 percent of seropositive individuals developed overt AIDS during a follow-up period of one to five years.[68,70–72] An additional 25 percent developed manifestation of ARC. We await further studies to clarify the proportion of HTLV-III infected persons who will develop overt AIDS and to learn of their long-term prognosis.

Recommendations for the Seropositive Patient The ELISA positive individual should undergo a confirmatory test. This is frequently the Western Blot technique, an electrophoretic assay to detect virus particles in the serum. If the Western Blot technique is positive, a thorough medical evaluation is warranted. Additional laboratory studies include tests for immune function, tests for other sexually transmitted diseases, and if available, viral cultures for HTLV. The Public Health Service has published recommendations for these individuals[70] (Table 6, next page).

Implications of HTLV-III Testing

Clearly the advantage of a nationwide screening program for HTLV-III antibody is to minimize the contam-

Table 5. Frequency of HTLV-III Antibodies in Select Populations*

	Percent
AIDS patients	68–100
AIDS related complex	84–100
Homosexual men	22–65
Intravenous drug abusers	87
Hemophilia A	56–72
Female sexual partners of male AIDS patients	35
Haitian immigrants†	<5
Persons with no known risk for AIDS	<1

* Centers for Disease Control. Provisional Public Health Service inter-agency recommendations for screening donated blood and plasma for antibody to the virus causing acquired immunodeficiency syndrome. *MMWR* 34(1985):5–7.

† Frank, E.; Weiss, S.H.; Compas, J.C. *et al.* "AIDS in Haitian-Americans, A Reassesment." *Cancer Res* (in press).

ination of the nation's blood supply and the risk of transmission of HTLV infection to others.

The widespread introduction of HTLV-III antibody testing has caused alarm among certain segments of the population. Currently the ELISA test is intended for screening of blood products and in epidemiological AIDS research. It is not a diagnostic test for AIDS. In time the ELISA testing undoubtedly will be used for other applications. The extensive employment of this test will create many complex medical, ethical, social, and economic issues.

Serious questions need to be addressed about patient confidentiality versus public health needs, inappropriate use of the test (that is, as a surrogate marker for homosexuality), the denial of employment, life insurance, and civil liberties to select members of high-risk groups.

The AIDS epidemic has placed a severe economic stress on the health care system of America. Testing the 12 million units of blood collected in the United States each year from five to six million donors will be a substantial expense.[73] The cost of ELISA testing, notification of donors, and medical counselling is estimated to be about $100 million per year.[73]

Diagnostic Updates

While recent developments in antibody detection against the HTLV-III virus has increased our ability to detect the disease, the test still has limitations. As such, the diagnosis of AIDS continues to be clinical. The following discussion will briefly update important diagnostic modalities in the evaluation of an AIDS patient.

Table 6. Recommendations for Persons with Seropositive HTLV-III Antibodies*

1. Regular medical evaluations are advised.
2. Infection may be spread by sexual intercourse, intimate kissing, and sharing of needles.
3. Refrain from donating blood, plasma, body organs, other tissue, and sperm.
4. Do not share toothbrushes, razors, or other items that may be contaminated with blood.
5. Seropositive women are at risk of transmitting the infection to their offspring.
6. Inform your physician or dentist of your antibody status, so that proper precautions can be taken to prevent transmission to others.
7. Test other persons who "may have been infected" through their contact with you.

* Centers for Disease Control. Provisional Public Health Service interagency recommendations for screening donated blood and plasma for antibody to the virus causing acquired immunodeficiency syndrome. *MMWR* 34(1985):5–7.

Roentograms Since the initial presentation in AIDS may be one of a mild, unapparent illness that can rapidly progress to severe malaise with dyspnea and profound hypoxia, it becomes imperative to examine the chest radiographs carefully for subtle, early changes. The clinical manifestations may precede the radiographic changes for two weeks to as long as 18 months.[74] Accordingly, patients with pulmonary manifestations of AIDS may have typical, atypical abnormal, or even normal chest roentograms.[75] Most often these patients have pulmonary infections due to *P carinii*, however infection by multiple organisms or infection superimposed on neoplasia are also common.

A common roentographic pattern in AIDS patients with *P carinii* pneumonia consists of a diffuse reticulogranular perihilar interstitial infiltration that progresses into an homogeneous consolidation.[75] The periphery and the apices are usually spared, and pleural effusions and definite hilar adenopathy are rare. A significant number of patients with PCP infections present with normal chest films.[75] Patients with *P carinii* who showed no obvious pulmonary findings on roentgenograms manifest the best prognosis.

Pulmonary involvement by Kaposi's sarcoma can coexist with opportunistic infections. Discriminating the two by radiographs is difficult.[74–76] An accurate diagnosis requires biopsy.

In conclusion, roentographic studies are helpful in the diagnosis and management of AIDS patients but are not pathognomonic for any specific infection or malignancy. Prompt procurement of pulmonary tissue for identification of the infectious agent or malignancy is recommended in all patients suspected of pulmonary infection.

Computerized Tomography AIDS patients frequently present with neurological disease, and computed tomography (CT) with contrast enhancement proves valuable in delineating intracranial masses and cerebral atrophy.[77–82] Angiography can confirm the location of the lesion and the cortical veins before biopsy.[77]

Other interesting findings on CT scan that may lead an unwary physician astray in assessing AIDS are found in cases of Lymphadenopathy syndrome or ARC and KS patients. Abdominal CT scan in both groups is abnormal, consisting of splenomegaly in half the cases and retroperitoneal lymphadenopathy in virtually all patients.[13] Clusters of abdominal nodes about 0.75 to 1.0 cm in diameter are most prevalent in the mesentry, paraaortic, paracaval, and iliac chains. Individually massively enlarged nodes or large mats of adjacent nodes are rare, unlike the findings in lymphoma or metastatic carcinoma.[83] Therefore, abdominal lymph-

adenopathy or splenomegaly in a patient with KS or ARC should not be interpreted as evidence of disseminated disease. Biopsy of abnormal nodes may be warranted.

Renal Ultrasound This has been studied as a diagnostic tool in monitoring the progress of renal dysfunction in AIDS patients. Schaffer *et al.* studied ten AIDS patients with varying degrees of renal dysfunction and found on renal sonography that all patients with focal segmental glomerulosclerosis had enlarged kidneys and increased cortical echogenicity.[84] These authors suggest that a baseline renal ultrasound might be of benefit for comparison if the patient ultimately presents with proteinuria or uremia. Studies have shown that increasing sonar echogenicity on serial sonograms may indicate progressive renal impairment,[85,86] thus the utility of sonograms may be in the early detection of impending renal dysfunction.

Lymph Node Biopsy Patients presenting with fever and lymphadenopathy should be evaluated for infectious, neoplastic, and other causes of lymphadenopathy (Table 5). Indications for lymph node biopsy in these patients are reviewed in Table 6.[14]

Health-Care Updates

Health-care workers do not appear to have a high risk for contraction of AIDS; the majority of reported cases among health-care personnel have occurred in members belonging to high-risk groups.[87] To date, there is no evidence of HTLV-III transmission to hospital personnel from casual contact with AIDS patients or their laboratory specimens.

The risks of HTLV-III transmission and seroconversion in health-care workers without any known risk factors for AIDS is very low.[68,88–93] A combined series of 1,758 health-care personnel who have cared for AIDS patients revealed 26 (1.5 percent) were seropositive, and all but three belonged to groups at increased risk for AIDS.[94] Two of these individuals probably acquired the HTLV-III virus through occupational exposure; although it is always difficult to be totally confident that additional risk factors for AIDS were absent. The third individual was an anonymous donor. In none of these cases were pre-exposure serum samples obtained to date the onset of infection. However, a case of definitive HTLV-III seroconversion has been reported in a nurse from Great Britain following an accidental needlestick injury.[95] There are some cases of AIDS in health-care workers without either apparent risk factors or known nosocomial exposure to AIDS patients.[2] Neither of the two known cases of occupational transmission of HTLV-III in the United States have developed AIDS.

The CDC has recommended precautions for health-care personnel involved in the care of AIDS patients.[88,96] Additional recommendations specific for medical personnel include: (1) Personnel who are immunosuppressed or who are pregnant should not provide direct patient care for AIDS patients because of the possibility of cytomegalovirus and other opportunistic infection transmission. (2) Masks should be worn by anyone suctioning intubated patients. (3) When blood or bodily fluid exposure is expected, gloves should be worn. When more significant exposure is anticipated (that is, endoscopy) gloves, gown, mask, and goggles should be worn for complete protection. (4) In the event that cardiopulmonary resusitation must be instituted, devices to protect oral mucous membranes from blood or bodily fluid exposure should be used.

Needlestick injuries and cuts with instruments accounted for over 80 percent of the exposures.[90] Over 40 percent of these exposures among health-care workers might have been prevented by following recommended precautions.[90]

Postexposure care should consist of local wound care, tetanus prophylaxis, and also guidelines established for immunoprophylaxis for viral hepatitis.[93,97] The source patient should be assessed for the likelihood of HTLV-III infection. If the source patient is seronegative for HTLV-III/LAV and has no evidence of HTLV-III infection, no further follow-up of the health care worker is necessary. However, if the source patient who has AIDS or other evidence of HTLV-III/LAV infection, declines testing or is seropositive, the health-care worker should be evaluated clinically and serologically for evidence of HTLV-III infection.[96]

An area of particular concern to medical personnel is whether the hepatitis B vaccine is safe. Many individuals at risk for hepatitis B have not received vaccination because of fear the vaccine may harbor the AIDS virus and survive the inactivation steps used in the manufacture of the virus. Recent studies have concluded that no detectable viable virus is present after treatment and that examination of the vaccine reveals no AIDS virus-related nucleic acid sequences. Approximately 700,000 U.S. hepatitis B vaccine recipients have been followed for the development of AIDS; 68 cases of AIDS have occurred among this group of which 65 have known risk factors for AIDS. The risk factors for the remaining three are under investigation.[98]

Conclusion

The acquired immunodeficiency syndrome continues to be a major medical problem in the United States and abroad with major issues in public health, medical,

social, moral, ethical, legal, and economic implications. The importance of this disease is of concern to all health-care providers. Prompt recognition of the syndrome, appropriate diagnostic testing, early and expedient institution of therapy, and supportive psychosocial services may improve the quality of life and the grim prognosis of these victims.

References

1. Centers for Disease Control. "Pneumocystis Pneumonia in Los Angeles." *MMWR* 30(1981):250–52.

2. Chamberland, M.E.; Castro, K.G.; Haverkos, H.W.; Miller B.I.; Thomas P.A. *et al.* "Acquired Immunodeficiency Syndrome in the United States: An Analysis of Cases Outside High-incidence Groups." *Ann Intern Med* 101(1984):617–23.

3. Centers for Disease Control. "Update-Acquired Immunodeficiency Syndrome—United States." *MMWR* 35(1986):17–21.

4. Sarngadharan, M.G.; Popovic, M.; Bruch, L.; Schupbach, J.; and Gallo, R.C. "Antibodies Reactive with Human T-lymphotrophic Retroviruses (HTLV-III) in the Serum of Patients with AIDS." *Science* 224(1984):506–508.

5. Quinn, T.C. "Perspectives on the Future of AIDS." *JAMA* 253:(1985):247–49.

6. Landesman, S.H.; Ginzburg, H.M.; and Weiss, S.H. "The AIDS Epidemic." *N Engl J Med* 312(1985):521–25.

7. Centers for Disease Control. "Update-Acquired Immunodeficiency Syndrome—United States." *MMWR* 31(1982):507–14.

8. Kornfield, H.; Vande Stouwe, R.A.; Lange, M. *et al.* T-lymphocyte Subpopulations in Homosexual Men." *N Engl J Med* 307(1982):729–31.

9. Centers for Disease Control. "Persistent Generalized Lymphadenopathy among Homosexual Males." *MMWR* 31(1982):249–51.

10. Ioachim, H.L.; Lerner, C.W.; and Tapper, M.L. "Lymphadenopathies in Homosexual Men." *JAMA* 250(1983):1306–1309.

11. Metroka, C.; Cunningham-Rundles, S.; Pollack, M. *et al.* "Generalized Lympadenopathy in Homosexual Men." *Ann Intern Med* 99(1983):585–91.

12. Fauci, A.S.; Masur, H.; Gelmann, E.P.; *et al.* "The Acquired Immunodeficiency Syndrome: An Update." *Ann Intern Med* 102(1985):800–13.

13. Abrams, D.I.; Mess, T.P.; and Volberding, P. "Lymphadenopathy: Update of a 40-month Prospective Study." Read before the International Conference on Acquired Immunodeficiency Syndrome, Atlanta. GA, 1985.

14. Goedert, J.J.; Sarngadharan, M.G.; Biggar, R.J. *et al.* "Determinants of Retrovirus (HTLV-III) Antibody and Immunodeficiency Condition in Homosexual Men." *Lancet* 2(1984):711–15.

15. Ferino, P.M.; Jaffe, H.W.; Palmer, E. *et al.* "Transfusion-associated Acquired Immunodeficiency Syndrome-Evidence for Persistent Infection in Blood Donors." *N Engl J Med* 312(1985):1293–96.

16. Salahuddin, S.Z.; Groopman, J.E.; Mardham, P.D. *et al.* "HTLV-III in Symptom Free Seronegative Persons." *Lancet* 2(1984):1418–20.

17. Harris, C.; Small, C.B.; Klein, R.S. *et al.* "Immunodeficiency in Female Sexual Partners of Men with the Acquired Immunodeficiency Syndrome." *N Engl J Med* 308(1983):1181–84.

18. Pitchenik, A.E.; Shafron, R.D.; Glasser, R.M. *et al.* "The Acquired Immunodeficiency Syndrome in the Wife of a Hemophiliac." *Ann Intern Med* 100(1984):62–65.

19. Groopman, J.E.; Sarngadharan, M.G.; Salahuddin, S.Z. *et al.* "Apparent Transmission of Human T-cell Leukemia Virus Type III to a Heterosexual Woman with the Acquired Immunodeficiency Syndrome." *Ann Intern Med* 102(1985):63–66.

20. Redfield, R.R.; Markham, P.D.; Salahuddin, S.Z. *et al.* "Heterosexual Promiscuity: An Emerging Risk Factor for HTLV-III Disease?" Read before the International Conference on Acquired Immunodeficiency Syndrome, Atlanta, GA, 1985.

21. Rabkin, C.; Lekatsas, A.; Walker, J.; O'Donnell, R.; Garcia, N.; Thomas, P. "Acquired Immunodeficiency Syndrome in Heterosexual Males Associated with Sexual Contacts." Read before the International Conference on Acquired Immunodeficiency Syndrome, Atlanta, GA, 1985.

22. Piot, P.; Taelman, H.; Minlangu, K.B. *et al.* "Acquired Immunodeficiency Syndrome in Heterosexual Population in Zaire." *Lancet* 2(1984):65–69.

23. Brun-Vezinet, F.; Rouzioux, C.; and Montagnier, L. *et al.* "Prevalence of Antibodies to Lymphadenopathy Associated Retovirus in African Patients with AIDS." *Science* 226(1984):453–56.

24. Gong, V. "Acquired Immunodeficiency Syndrome (AIDS)—Review." *Am J Em* Med 2(1984):336–46.

25. Murray, J.F.; Felton, C.P.; Garay, S. *et al.* "Pulmonary Complications of the Acquired Immunodeficiency Syndrome: Report Of a National Heart, Lung and Blood Institute Workshop." *N Engl J Med* 310(1984):1682–88.

26. Wollschlager, C.M.; Khan, F.A.; Chittkara, R.K. *et al.* "Pulmonary Manifestations of the Acquired Immunodeficiency Syndrome." *Chest* 85(1984):197–202.

27. Hopewell, P.C. and Luce, J.M. "Pulmonary Involvement in the Acquired Immunodeficiency Syndrome." *Chest* 87(1985):104–12.

28. Overland, E.S.; Nolan, A.J.; and Hopewell, P.C. "Alteration of Pulmonary Function in Intravenous Drug Abusers: Prevalence Severity and Characterization of Gas Exchange Abnormalities." *Am J Med* 68(1980):231–37.

29. Coleman, D.L.; Dodek, P.M.; Luce, J.M. *et al.* "Diagnostic Utility of Fiberoptic Bronchoscopy in Patients with Pneumocystis carinii Pneumonia and the Acquired Immunodeficiency Syndrome." *Am Rev Respir Dis* 129(1984):36.

30. Coleman, D.L.; Hattner, R.S.; Luce, J.M.; *et al.* "Correlation between Gallium Lung Scans and Fiberoptic Bronchoscopy in Patients with Suspected Pneumocystis carinii Pneumonia and the Acquired Immune Deficiency Syndrome." *Am Rev Respir Dis* 130(1984):1166–69.

31. Broaddus, V.C.; Dake, M.; Stulbarg, M. *et al.* "Bronchoalveolar Lavage in the Diagnosis of Opportunistic Infections in Patients with the Acquired Immunodeficiency Syndrome." *Am Rev Respir Dis* 129(1984):35.

32. Stover, D.E.; White, D.A.; Romano, P.A. *et al.* "Diagnosis of Pulmonary Disease in Acquired Immune deficiency Syndrome: Role of Bronchoscopy and Bronchoalveolar Lavage." *Am Rev Respir Dis* 130(1984):659–62.

33. Bredesen, D.E. and Messing, R. "Neurological Complications of the Gay Immunosuppressed Syndrome." *Ann Neurol* 12(1980):80.

34. Snyder, W.D.; Simpson, D.M.; Nielsen, S. *et al.* "Neurological Complications of Acquired Immune Deficiency Syndrome. Analysis of 50 Patients." *Ann Neurol* 14(1983):403–18.

35. Britton, C.B. and Miller, J.R. "Neurologic Complications in Acquired Immunodeficiency Syndrome (AIDS)." *Neurologic Clinic* 2(1984):315–39.

36. Levy, R.M.; Bredesen, D.E.; and Rosenblum, M.L. "Neurological Manifestations of the Acquired Immunodeficiency Syndrome (AIDS): Experience at UCSF and Review of the Literature." *J Neurosurg* 62:(1985):475–92.

37. Herman, P. "Neurological Complications of Acquired Immunologic Deficiency Syndrome (abstract)." *Neurology* 33 (Suppl 2)(1983):105.

38. Jordan, B.D.; Navia, B.A.; Cho, E.S.; Petito, C.K.; and Price,

R.W. "Neurological Complications of AIDS: An Overview Based on 110 Autopsied Patients." Presentation at the International Conference on Acquired Immunodeficiency Syndrome, Atlanta, GA, 1985.

39. Luft, B.J.; Brooks, R.G.; Conley, F.K.; McCabe, R.E.; and Remington, J.S. "Toxoplasmic Encephalitis in Patients with Acquired Immunedeficiency Syndrome." *JAMA* 252(1984):913–17.

40. Palacios, E.; Gorelick, P.B.; Gonzales, C.F.; and Fine, M. "Malignant Lymphoma of the Nervous System." *Comput Assist Tomogr* 6(1982):689–701.

41. Moskowitz, J.B.; Hensley, G.T.; Chan, J.C.; Gregorios, J.; and Conleyt, F.K. "The Neuropathology of Acquired Immune Deficiency Syndrome." *Arch Pathol Lab Med* 108(1984):867–72.

42. Mildivan D.; Mathur, U.; Enlow, R.W. *et al.* "Opportunistic Infections and Immunedeficiency in Homosexual Men." *Ann Intern Med* 96(pt. 1)(1982):700–704.

43. Shaw, G.M.; Harper, M.E.; Hahn, B.H. *et al.* "HTLV-III Infections In Brains of Children and Adults with AIDS Encephalopathy." *Science* 227(1985):177–82.

44. Holland, G.N.; Gottlieb, M.S.; Yee, R.D. *et al.* "Ocular Disorders Associated with a New Severe Acquired Immunodeficiency Disorder." *Am J Ophthalmol* 93(1982):393–402.

45. Goldstick, L.; Mandybur, T.I.; and Bode, R. "Spinal Cord Degeneration in AIDS." *Neurology* 35(1985):103–106.

46. Klein, R.S.; Harris, C.A.; Small, C.B.; Moll, B.; Lesser, M.; Friedland, G.H. "Oral Candidiasis in High-risk Patients as the Initial Manifestations of the Acquired Immunodeficiency Syndrome." *N Engl J Med* 311(1984):354–64.

47. Gotlieb, M.S.; Groopman, J.E.; Weinstein, W.M. *et al.* "The Acquired Immunodeficiency Syndrome." *Ann Intern Med* 99(1983):208–220.

48. Altman, D. "Gastrointestinal Cryptosporidiosis and Cytomegalovirus Enterocloitis." *Front Radiat Ther Oncol* 19(1985):88–90.

49. Meiselman, M.K.; Cello, J.P.; and Margaretten, W. "Cytomegalovirus Colitis: Report of the Clinical, Endoscopic, and Pathologic Findings in Two Patients with the Acquired Immune Deficiency Syndrome." *Gastroenterology* 88(1985):171–75.

50. Mildvan, D.; Mathur, U.; Enlow, R. *et al.* "Opportunistic Infections and Immune Deficiency in Homosexual Men." *Ann Intern Med* 96(1982):539–46.

51. Roth, R.I.; Owen, R.L.; Keren, D.F.; and Volberding, P.A. "Intestinal Infection with Mycobacterium Avium in Acquired Immune Deficiency Syndrome." *Dig Dis Sci* 30(1985):497–504.

52. Glaser, J.B.; Morton-Kute, L.; Berger, S.R. *et al.* "Recurrent Salmonella Typhimurium Bacteremia Associated with the Acquired Immunodeficiency Syndrome." *Ann Int Med* 102(1985):189–93.

53. Altman, D. "Kaposi's Sarcoma: Gastrointestinal Manifestations." *Front Radiat Ther Oncol* 19(1985):123–25.

54. Friedman, S.L.; Wright, T.L.; and Altman, D.F. "Gastrointestinal Kaposi's Sarcoma in Patients with Acquired Immunodeficiency Syndrome." *Gastroenterology* 89(1985):102–108.

55. Rao, T.K.S.; Filippone, E.J.; Nicastri, A.D. *et al.* "Associated Focal and Segmental Glomerulosclerosis in the Acquired Immunodeficiency Syndrome." *N Engl J Med* 310(1984):669–73.

56. Pardo, V.; Aldana, M.; Colton, R.M. *et al.* "Glomular Lesions in the Acquired Immunodeficiency Syndrome." *Ann Intern Med* 101(1984):429–34.

57. Spivack, J.L.; Bender, B.S.; and Quinn, T.C. "Hematologic Abnormalities in the Acquired Immune Deficiency Syndrome." *Am J Med* 77(1984):224–28.

58. Morris, L.; Distenfeld, A.; Amorosi, E. *et al.* "Autoimmune Thrombocytopenia Purpura in Homosexual Men." *Ann Intern Med* 96(1982):277–84.

59. Walsh, C.M.; Nardi, M.A.; and Karpatkin, S. "On the Mechanism of Thrombocytopenia Purpura in Sexually Active Homosexual Men." *N Engl J Med* 311(1984):635–39.

60. Pasternak, J. and Bolivar, R. "Bone Marrow Examination and Culture in the Diagnosis of Acquired Immunodeficiency Syndrome (AIDS)" (letter). *Arch Intern Med* 143(1983):1495.

61. Greene, L.W.; Cole, W.; Greene, J.B. *et al.* "Adrenal Insufficiency as a Complication of the Acquired Immunodeficiency Syndrome." *Ann Intern Med* 101(1984):497–98.

62. Silver, M.A. "Cardiac Involvement by Kaposi's Sarcoma in Acquired Immune Deficiency Syndrome." *Am J Cardiol* 53(1984):983–85.

63. Lewis, W.; Lipsick, J.; and Camimarosano, C. "Cryptococcal Myocarditis in Acquired Immune Deficiency Syndrome." *Am J Cardiol* 55(1985):1240.

64. Forstein, M. "The Psychosocial Impact of the Acquired Immunodeficiency Syndrome." *Semin Oncol* 11(1984):77–82.

65. Dilley, J.W.; Ochitill, H.N.; Perl, M. *et al.* "Findings in Psychiatric Consultations with Patients with Acquired Immune Deficiency Syndrome." *Am J Psych* 142(1985):82–86.

66. Nichols, S.E. "Psychiatric Aspects of AIDS." *Psychosomatics* 24(1983):1083–89.

67. Wellicsh, D.K. "UCLA Psychological Study of AIDS." *Front Radiat Ther Oncol* 19(1985):155–58.

68. Weiss, S.H.; Goedert, J.J.; Sarngadharan, M.G. *et al.* Screening Test for HTLV-III Antibodies: Specificity, Sensitivity, and Applications. *JAMA* 253(1985):221–25.

69. Ginzburg, H.M.; Weiss, S.H.; Macdonald, M.G.; and Hubbard, R.L. "HTLV-III Exposure among Drug Users." *Cancer Res* (in press).

70. Centers for Disease Control. "Provisional Public Health Service Inter-Agency Recommendations for Screening Donated Blood and Plasma for Antibody to the Virus Causing Acquired Immunodeficiency Syndrome." *MMWR* 34(1985):5–7.

71. Goedrert, J.J.; Sarngadharan, M.G.; Biggar, R.J. *et al.* "Determinants of Retrovirus (HTLV-III) Antibody and Immunodeficiency Conditions in Homosexual Men." *Lancet* 2(1984):711–6.

72. Melbye, M.; Biggar, R.J.; Ebbesen, P.; *et al.* "Seroepidemiology of HTLV-III Antibody in Danish Homosexual Men." *Br Med J* 289(1984):573–75.

73. Goldsmith, M.F. "Medical News." *JAMA* 253(1985):173–81.

74. McCauley, D.; Naidich, D.; Leitman, B. *et al.* "Radiographic Patterns of Opportunistic Lung Infections and Kaposi's Sarcoma in Homosexual Men." *AJR* 139(1982):653–58.

75. Cohen, B.A.; Pomaranz, S.; Rabinowitz, J.G. *et al.* "Pulmonary Complications of AIDS: Radiologic Features." AJR 143(1984):115–22.

76. Brown, R.K.J.; Huberman, R.P.; and Vanley, G. "Pulmonary Features of Kaposi's Sarcoma." *Am J Roent* 139(1982):659–60.

77. Post, M.J.D.; Chan, J.C.; Hensley, G.T. *et al.* "Toxoplasmosis Encephalitis in Haitian Adults with Acquired Immunodeficiency Syndrome. A Clinical-pathological-CT Correlation." *AJR* 140(1983):861–68.

78. Elkin, C.M.; Leon, E.; Grenell, S.L.; and Leeds, N.E. "Intracranial Lesions in the Acquired Immunodeficiency Syndrome: Radiological (Computed Tomographic) Features." *JAMA* 253(1985):393–96.

79. Whelan, M.A.; Kricheff, I.I.; Handler, M. *et al.* "Acquired Immunodeficiency Syndrome. Cerebral Computed Tomographic Manifestations." *Radiology* 149(1983):477–84.

80. Kelly, W.M. and Brant-Zawadzki, M. "Acquired Immunodeficiency Syndrome. Neuroradiologic Findings." *Radiology* 149(1983):485–91.

81. Chan, J.C.; Moskowitz, L.B.; Olivella, J. *et al.* "Toxoplasma Encephalitis in Recent Haitian Entrants." *South Med J* 76(1983):1211–15.

82. Picchenik, A.E.; Fishl, M.A.; and Walls, K.W. "Evaluation of Cerebral Mass Lesions in Acquired Immunodeficiency Syndrome." *N Engl J Med* 308(1983):1099.

83. Federle, M.P. "Atypical Infections and Kaposi's Sarcoma in

AIDS-Radiographic Findings." *Front Radiat Ther Oncol.* 19(1985):117–22.

84. Schaffer, R.M.; Schwartz, P.E.; Becker, S.A. *et al.* "Renal Ultrasound in Acquired Immune Deficiency Syndrome." *Radiology* 153(1984):511–13.

85. Hricak, H.; Cruz, C.; Romanski, R. *et al.* "Renal Parenchymal Disease: Sonographic-histologic Correlation." *Radiology* 144(1982): 141–47.

86. Rosenfield, A.T.; Taylor, K.J.W.; and fe, C.C. "Clinical Applications of Ultrasound Tissue Characterization." *Radiol Clin North Am* 18(1980):31–58.

87. Centers for Disease Control. "An Evaluation of the Acquired Immunodeficiency Syndrome (AIDS) Reported in Healthcare Personnel-United States." *MMWR* 32(1983):358–60.

88. Centers for Disease Control. "Acquired Immune Deficiency Syndrome (AIDS): Precautions for Clinical and Laboratory Staffs." *MMWR* 31(1982):577–80.

89. Centers for Disease Control. "Prospective Evaluations of Health-care Workers Exposed via Parenteral or Mucous-membrane Routes to Blood and Bodily Fluids of Patients with Acquired Immunodeficiency Syndrome." *MMWR* 33(1984):181–82.

90. McCray, E.; Winslow, N.; Solomon, S.L.; Martone, W.J.; Onorato, I.M.; and Munn, V.P. "Prospective Evaluation of Health-care Workers with Parenteral or Mucous-membrane Exposure to Blood from Patients with Acquired Immunodeficiency Syndrome, United States: An Update." Read before the International Conference on AIDS, Atlanta, GA, 1985.

91. Hirsh, M.; Wormser, G.P.; Schooley, R.T. *et al.* "Risk of Nosocomial Infection with human T-cell Lymphotrophic Virus (HTLV-III)." *N Engl J Med* 313(1985):1–4.

92. Gerding, J.L.; Moss, A.R.; Bryant, C.E. *et al.* "Risk of acquired Immune Deficiency Syndrome (AIDS) Virus Transmission to Health Care Workers." in *Abstracts of the 25th Interscience Conference on Antimicrobial Agents and Chemotherapy*, Washington, DC. American Society of Microbiology, 1985, Vol. 25, p 131.

93. Weiss, S.H.; Saxinger, C.; Rechtman, D. *et al.* "HTLV-III Infection among Health-care Workers: Association with Needle-stick Injuries." *JAMA* 254(1985):2089–93.

94. Centers for Disease Control. "Update: Evaluation of Human T-Lymphotrophic Virus Type-III/Lymphadenopathy Associated Virus in Health-care Personnel-United States." *MMWR* 34(1985):575–78.

95. Anonymous. "Needlestick Transmission of HTLV-III from a Patient Infected in Africa." *Lancet* ii(1984):1376–77.

96. Centers for Disease Control. "Summary: Recommendations for Preventing Transmission of Infection with HTLV-III in the Workplace." *MMWR* 34(1985):681–95.

97. ACIP. "Immune Globulins for Protection against Viral Hepatitis." *MMWR.* 30(1981):423–28, 433–35.

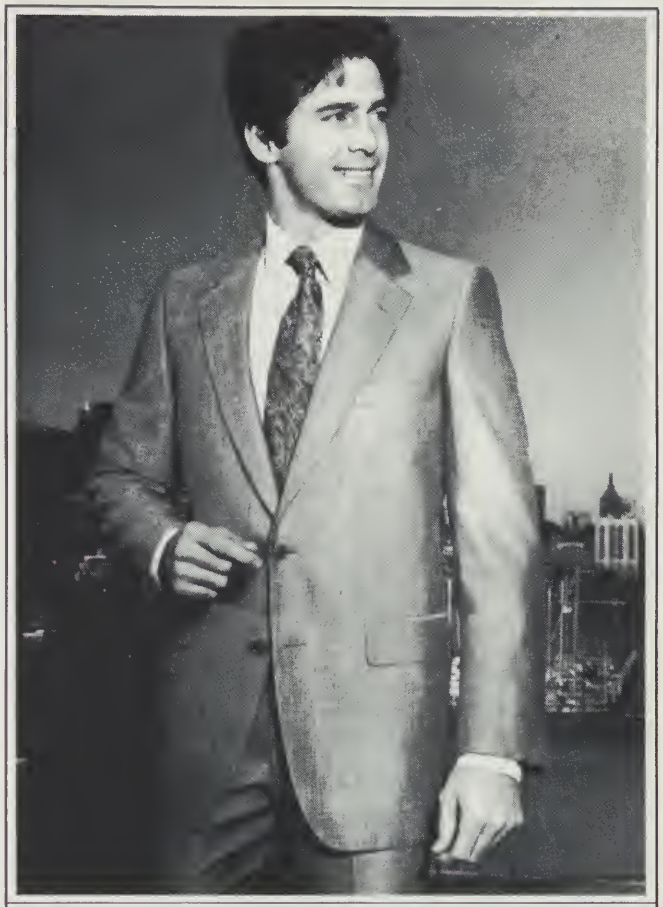
98. Centers for Disease Control. "Hepatitis B Vaccine: Evidence Confirming Lack of AIDS Transmission." *MMWR* 33(1984):685–86.

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Editorial

Tuberculosis Revisited—Again

Tuberculosis was a major cause of morbidity and mortality at the turn of the century and a major problem to the entire health-care delivery system, private and public. There are few diagnostic entities with such an abundance of literature and ongoing support from public and voluntary agencies.

There was a downward trend in the number of reported cases of tuberculosis in the United States prior to the availability of Streptomycin, Paramino-Salicylic acid (PAS), and Isoniazid (INH). In theory, the stage was set to eradicate the disease. The response to these dramatic events was caution: patients still spent long periods in sanitoriums receiving medication. This continued even when information became available that the disease was cured equally well whether the patient was treated at home or in a sanitorium; contacts of either group were at little risk of becoming infected. Bed rest, diet, and isolation from the community did not contribute to cure or to breaking the chain of transmission of the disease. On the other hand, effective chemotherapy and patient compliance were key factors to success.[1,2]

With the further decrease in the incidence of tuberculosis it became apparent that mass screening by chest radiography or tuberculin testing of populations with little risk of infection or disease did not contribute to early detection or diagnosis. In fact most cases were diagnosed after patients presented with symptoms of persistent cough, weight loss, and night sweats. It became apparent that patients should be discharged from follow-up after completion of an appropriate course of chemotherapy.[3,4] With the closure of sanitoriums, initial institutionalization in acute care hospitals in the community is indicated only for short periods to establish a diagnosis, to initiate chemotherapy, and to treat other often unrelated medical and surgical conditions.[5]

The chemotherapeutic agents initially available were reinforced by the advent of Pyrazinamade (PZA), Ethambutol (Emb), and Rifampin. Data from overseas and programs within the United States showed that the duration of chemotherapy could be shortened from the then "standard" 18 to 24 months to 9 months, providing the regimen contained INH and Rifampin. Furthermore the traditional duration and mechanisms of isolation could be shortened and made less cumbersome.[6,7]

The objective of these comments is not to find an explanation of why tuberculosis is still around and a constant problem in many geographic areas. It is worthwhile commenting on noncompliance particularly in the alcoholic and socially dislocated patient[8] and on the anxiety generated from time to time by the influx of individuals from areas of high incidence of disease outside the United States. This latter group brings new and additional challenges to the resources available in dealing with patients and contacts who are unfamiliar with the language, health-care delivery system, and culture of this country. Flexibility in the location and time of clinic hours, constant reinforcement by the health-care team, the use of interpreters, and early retrieval of patients who fail to show up for treatment are some of the strategies used.[9] Chemotherapy dispensed under supervision on a daily or intermittent basis whereby the patient is seen to ingest and swallow the medication is now well-established.[10]

The following "guidelines" should act as an update on the endeavors of the State of Maryland Department of Health and Mental Hygiene in dealing with tuberculosis control in this state. One must remember the guidelines were designed for use primarily in health departments but could well serve as a resource for all members of the health-care delivery system.

The message they convey may be summarized as early detection and evaluation of cases, initiation of appropriate chemotherapy, compliance and the use of chemopreventive therapy in groups at risk of becoming infected because of close contact to untreated cases or individuals not appropriately "chemically isolated." It also appears the duration of chemotherapy can be further shortened to six months.

The guidelines stress setting priorities in all locations and omitting endeavors that might be considered as nonproductive or redundant.

They are timely and may raise some questions.

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References

1. Dawson, J.J.Y. *et al.* "Five-year Study of Patients with Pulmonary Tuberculosis in a Concurrent Comparison of Home and Sanitorium Treatment for One Year with Isoniazid Plus PAS." *Bull WHO* 34(1966):533.

2. Fox, W. "Changing Concepts in the Chemotherapy of Pulmonary Tuberculosis." *Am Rev Repir Dis* 97(1968):767.

3. Stead, W.W.; and Jurgens, G.H. "Productivity of Prolonged Follow-up After Chemotherapy for Tuberculosis." *Am Rev Respir Dis* 2(1973):314.

4. American Thoracic Society. "Discharge of Tuberculosis Patients from Medical Surveillance." *Am Rev Respir Dis* 113(1976):5709.

5. Dandoy, S. "Current Status of General Hospital Use for Patients with Tuberculosis in the United States: Eight Year Update." *Am Rev Respir Dis* 128(1983):336.

6. American Thoracic Society. "Control of Tuberculosis." *Am Rev Respir Dis* 128(1983):336.

7. Committee on Chemotherapy of Tuberculosis. "Standard Therapy for Tuberculosis 1985." *Chest* (supplement) 87(1985): 117 S.

8. American Thoracic Society. "Treatment of Tuberculosis in Alcoholic Patients." *Am Rev Respir Dis* 116(1977):559.

9. Curry, J.P. "District Clinics for Outpatient Treatment of Tuberculosis Problem Patients." *Disease of the Chest* 5(1964):524.

10. McDonald, R.J.; Memon, A.N.; Reichman, L.B. "Successful Supervised Ambulatory Management of Tuberculosis Treatment Failures." *Ann Intern Med* 96(1982):297.

TUBERCULOSIS CONTROL PROGRAM GUIDELINES

William Randall, M.D.

Tuberculosis has declined dramatically over the past 40 years. The advent of effective drug therapy for tuberculosis radically changed the medical direction and the treatment location for tuberculosis disease. The patient has moved from the closed environment of the sanitorium to the mainstream of outpatient care. In most cases patients can return to their jobs within weeks, and total treatment time for the uncomplicated case is reduced to six or nine months.

Despite all these advances, tuberculosis still remains a significant cause of morbidity and a far too frequent cause of mortality in Maryland today. As funding for health care continues to decline, it is imperative that public health resources allocated for tuberculosis control be allocated wisely.

To address this problem, a task force composed of members of the State and local health departments, clinicians, and consultants from the discipline of pulmonary medicine, met periodically for over a year to develop guidelines to assist in the containment and control of tuberculosis in Maryland. Special recognition for their efforts and diligence in this undertaking belongs to David Glasser, M.D., MPH, Chief, Bureau of Communicable Diseases, Baltimore City; Ebenezer Israel, M.D., MPH, Chief, Assistant Directorate Epidemiology and Disease Control; Diane Matuszak, M.D., MPH, Chief, Community Epidemiology; William Randall, M.D., Consultant, Respiratory Diseases; Jeannette Rose, BSN, MPH, Chief Tuberculosis Control Program; Barbara Santamaria, RN, MPH, Consultant, Tuberculosis Control Program and Gillian van Blerk, M.D., MPH, Director, Adult Health Services, Anne Arundel County Health Department. Special appreciation for his review and valuable comments goes to Eugene Rosenberger, M.D., Medical Program Specialist, Communicable Disease Division, Montgomery County Health Department. In addition, comments were solicited from all Health Officers and their Tuberculosis Control Program staff in Maryland with special expertise in this field.

The Guidelines developed by this task force provide minimal effective standards for the treatment of tuberculosis, preventive therapy of tuberculosis, tuberculin skin testng, and priorities for tuberculosis control programs. While designed primarily for local health departments, these guidelines will also provide useful information to practicing clinicians.

The most important priority in these guidelines is for the rapid and effective treatment of all cases of active tuberculosis. To accomplish this task, we have strongly suggested supervised chemotherapy. Utilizing a supervised therapy regimen will ensure patient compliance, thus reducing the period of communicability. It also allows for careful observation of any side effects and for an adjustment in therapy if indicated.

After reviewing the recent literature of Glasser (5), Chaulet (6), Snider (7), and Fox (9), we have concluded that a minimum of six months supervised therapy with an initial four drug regimen consisting of isoniazid, rifampin, streptomycin, and pyrazinamide followed by a four month regimen of isonazid and rifampin will be safe, effective, and cost-efficient. For most cases of extra pulmonary tuberculosis this regimen would also be effective. Alternative guidelines are provided for the treatment of tuberculosis in pregnant women and in children.

Isoniazid (INH) continues to be the drug of choice for preventive therapy of high-risk tuberculin reactors. While 9 to 12 months remains the optimal duration for INH preventive therapy, we reviewed the current literature in order to answer the many questions related to a shorter preventive treatment regimen. A minimum of 6 months of therapy is recommended for those patients with normal chest radiographs. In reactors with abnormal chest radiographs or with a history of inadequately treated pulmonary tuberculosis, a total of 12 months of INH should be given. In no instance is more than 12 months of INH preventive therapy indicated. Careful monthly monitoring for possible side effects remains a priority in any preventive therapy regimen.

Tuberculin testing with the Mantoux technique remains the most precise skin testing method as well as the most cost effective way to screen for tuberculosis in both children and adults. We strongly advocate the skin testing of all close contacts of patients with tuberculosis. Mass screening of low risk populations has a very low yield of detecting new tuberculosis cases and is not cost effective. Finally, the two-step skin testing technique to identify those patients with a "booster phenomenon" has been of very low yield in Maryland and is not recommended as a routine procedure (10).

In conclusion, we believe that these new Guidelines provide local health departments and practicing physicians with an up-to-date outline on the management of tuberculosis in Maryland. We hope that our concerted efforts will continue to be evidenced in a declining incidence in morbidity and mortality from this disease.

References:

1. Snider, DE Jr. Farer, LS. 1984. Preventive therapy for tuberculosis infection: An intervention in need of improvement. Amer Rev Respir Dis. 130:355-356.

2. Krebs, A. 1982. The efficacy of preventive treatment with isoniazid in a high risk group. Scand J Respir Dis. (Suppl). 102:62-64.

3. Krebs, A. Farer, LS. Snider, WE. Thompson, NJ. 1979. Five years of follow-up of the IUAT trial of isoniazid prophylaxis in fibrotic lesions. Bull Intern Union Against Tubercl. 54:65-69.

4. Efficacy of various durations of isoniazid preventive therapy for tuberculosis: Five years of follow-up in the IUAT trial. 1982. Bull WHO. 60:555-564.

5. Glasser, D. 1984. Superiority of six months duration of isoniazid to twelve months in the programmatic chemoprevention of tuberculosis in low-risk tuberculin reactors. Amer Rev Respir Dis. (Suppl). 120:A199.

6. Chaulet, P. 1983. Synthesis on chemotherapy, bacteriology, prevention and surveillance of tuberculosis. The chemotherapy of tuberculosis. Bulletin of the Internation Union Against Tuberculosis. Vol:58. No: 1.

7. Snider, Dixie Jr. M.D. et al. 1981. Preliminary results of six-month regimens studied in the states and in Poland. Chest. 80: 727-729.

8. Controlled clinical trial of four six-month regimens of chemotherapy for pulmonary tuberculosis 1976. Second East African/British Medical Research Council Study. Amer Rev Respir Dis. 114:471-475.

9. Fox, W. 1981. Whither short-course chemotherapy ? Br J Dis Chest. 75:331-365.

10. Gross, T. Israel, E. et al. 1986. Low prevalence of the booster phenomenon in nursing home employees in Maryland. In Press.



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TB CONTROL PROGRAM PRIORITIES FOR RESOURCE ALLOCATION

The following is a list, in order of priority, of activities of tuberculosis control programs from a public health point of view. Number one is the highest priority, each succeeding activity should be undertaken only when all the activities above it in the list are fully implemented. Often the particular circumstances will dictate a higher priority for an individual than is seen when one looks at overall tuberculosis control program goals. This prioritization does, however, emphasize the need to give precedence to treatment of disease.

1. Treatment TB Cases - Smear positive and drug resistant - culture positive.
2. All Tuberculosis Cases-Treatment.
3. Supervised Treatment-smear positive cases.
4. Supervised Treatment-all Tuberculosis cases.
5. Investigation of close contacts of smear positive cases.
6. INH Preventive therapy contacts to smear positive cases < 6 years old.
7. INH Preventive therapy contacts to smear positive cases ≥ 6 years old-significant skin test reactions.
8. Investigation close contacts to all Tuberculosis cases.
9. INH Preventive therapy-contacts with significant skin test.
10. INH Preventive therapy other high risk groups-recent converter.
11. INH Preventive therapy other high risk groups-special medical conditons.
12. INH Preventive therapy other high risk groups-special populations.
13. Annual Screening (Mantoux skin testing) - health care personnel involved in direct care of Tuberculosis patients.
14. Initial Screening (Mantoux skin testing) - patients in extended care facilities, clients of geriatric day care facilities, and prison inmates.
15. Initial Screening (Mantoux skin testing) - immigrants from Asia, Africa, and Latin America.
16. Initial Screening (Mantoux skin testing) - alcoholics, drug abusers.
17. Initial Screening (Mantoux skin testing) - homeless, street people.

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
GUIDELINES FOR TUBERCULOSIS CONTROL

TUBERCULIN SKIN TESTING

I. INTRODUCTION

Tuberculin skin testing is used to detect infection with *M. tuberculosis*. The Mantoux method is the approved technique and is a useful tool for diagnosis, epidemiological investigation, and screening for *M. tuberculosis* infection.

Screening, per se, for persons with tuberculosis infection or disease has no preventive value. The preventive value comes from ensuring that persons, so identified, complete a recommended course of preventive therapy.

The following are minimum recommendations for the State of Maryland. A Health Officer or Medical Director of an institution may establish more stringent guidelines for defined subpopulations. When establishing local policies regarding tuberculosis screening programs, it is recommended that the cost effectiveness of such programs be thoroughly evaluated. As the prevalence of infection with *M. tuberculosis* decreases, the point *will* be reached when continued screening is no longer indicated. Several such analyses have been done in various jurisdictions in Maryland. These studies have indicated that the majority of screening done through tuberculin skin testing has very low yield in terms of detecting new tuberculosis cases and is **not** cost effective.

II. METHOD

The Mantoux technique is the intradermal injection of 0.1 ml of the purified protein derivative (PPD) tuberculin 5 TU (intermediate). The injection should be made using a platinum (26-gauge) or steel (27-gauge) needle, bevel upward, with a glass or plastic tuberculin syringe. The injection site should be the volar surface of the forearm.

A discrete, pale, elevation of the skin (a wheal) 6mm to 10mm in diameter should be produced when the prescribed amount of fluid is accurately injected.

Maryland has had several years' experience with two-step skin testing. Because of the low rate of "booster phenomenon" observed and the extremely low rate of tuberculosis disease among nursing home residents, two-step skin testing, as a routine procedure, is not judged to be necessary.

III. INTERPRETATION

The tuberculin skin test should be read 48 to 72 hours after the injection. The basis of interpretation is the presence or absence of induration. The results should **always** be recorded in millimeters (mm). An individual with a significant reaction should receive a chest x-ray as part of diagnostic evaluation.

known significant (positive) reactors should not be retested.

TUBERCULIN SKIN TEST INTERPRETATION

Size of Induration	Personal Characteristic	Interpretation
≥ 10mm	All individuals	Significant(positive) *M. tb.* infection
≥ 5 to < 10mm	Close contact and suspects	Significant (positive) *M. tb.* infection
≥ 5 to < 10mm	Other	Nonsignificant (negative) Not likely to be infected with *M. tb.* Possible cross reaction to other mycobacteria
< 5mm	All individuals	Nonsignificant (negative) Not likely to be infected with *M. tb.*

IV. TUBERCULIN SKIN TESTING IS RECOMMENDED FOR:

A. Diagnosis - tuberculin skin testing is useful in evaluating patients clinically suspected of having tuberculosis. Persons with signs (for example, radiographic abnormality and/or positive AFB smear) and/or symptoms (cough, hemoptysis, or weight loss) suggestive of current tuberculosis disease should be tuberculin skin tested. A nonsignificant skin test does not rule out tuberculosis in these cases; 5 to 25 percent of newly diagnosed cases of tuberculosis will have tuberculin skin test reactions in the "nonsignificant" range.

B. Epidemiologic Investigation - close contacts such as household members of known communicable tuberculosis cases or suspected communicable tuberculosis cases should be tuberculin skin tested.

1. High-Risk Contacts - Included in this group is any person who shared the environmental air space with a smear-positive source case in relatively close proximity. Members of the immediate family fall into this category. This also allows for a functional grouping that would include work, school, and social contacts who might be at as high a risk as members of the household. All high-risk contacts with initial nonsignificant skin tests should have a second skin test done three months after the source case has started a recommended treatment regime to rule out infection acquired just prior to the time of the original contact investigation.

2. Low-Risk Contacts - Applying various transmission factors, it is apparent that certain contacts have a low probability of becoming infected. This would indicate that tuberculin skin testing these contacts should be deferred until the higher-risk group has been studied. If there is no evidence of recent infection among the high-risk group, investigation need not be extended to the lower-risk contacts.

C. Establishing Tuberculin Status - Persons who are entering a situation with a high likelihood of exposure to infectious cases of tuberculosis (for example, health care personnel involved in the direct care of tuberculosis patients) should be tuberculin skin tested. Those who have significant reactions on initial testing should be evaluated as outlined in the preventive therapy recommendations. Periodic routine chest x-rays are not indicated in this group. There is no reason to retest persons with a known significant tuberculin reaction.

D. Persons from Epidemiologically Confirmed High-Risk Groups - Individuals from groups with a high prevalence of infection should be screened by the tuberculin skin test.

E. Persons with a history of BCG vaccination - should be skin tested if indicated. Interpretation of skin test results is the same; ignore history of BCG vaccination.

V. Additional Considerations

Due to the negligible yield in terms of detecting new cases in Maryland in schools, day care centers, maternity clinics, family planning clinics, food handlers, cosmetologists, Votech students, volunteers, most health care employees, and infants, routine screening is not recommended.

HIGH RISK GROUPS TO BE SCREENED *

Group	Initial testing	Routine Subsequent testing
1. Immigrants from Africa, Asia, and Latin America regardless of BCG status.	yes	no
2. Correctional facilities where the average length of stay exceeds 1 year.		
a. Inmates	yes	no
b. Personnel	no	no
3. Extended Care Facilities (nursing homes, long term residential care, and chronic disease hospitals)		
a. Clients	yes	no
b. Personnel	no	no
4. Day Care Facilities (child and geriatrics)		
a. Personnel	no	no
b. Clients in Child Day Care Facilities	no	no
c. Clients in Geriatric Day Care Facilities	yes	no
5. All Other Health Care Facilities Personnel involved in the direct care of tuberculosis patients (TB clinics)	yes	annually

* Personnel administering Mantoux tests should be adequately trained in the technique of intradermal injection and reading skin-test results.

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
GUIDELINES FOR TUBERCULOSIS CONTROL

TREATMENT OF TUBERCULOSIS

I. INTRODUCTION

The following are minimum recommendations for the State of Maryland. A Health Officer or Medical Director of an institution may establish more stringent guidelines for defined subpopulations.

There is ample data to indicate that the following regimens are safe, effective, cost efficient, and improve patient compliance.

II. TREATMENT OF TUBERCULOSIS

A. Recommended regimen in adults (see special considerations below).

Strictly supervised chemotherapy with:

Isoniazid (INH)	300 mg p.o. Daily
and	
Rifampin (RMP)	10-20 mg/kg up to 600 mg p.o. Daily
and	
Pyrazinamide (PZA)	15-30 mg/kg up to 2 gm p.o. Daily
and	
Streptomycin (SM)	15-20 mg/kg up to 1 gm IM 5 days/wk

These four drugs should be given for eight weeks; this "induction" phase is then followed by four months of supervised therapy with:

Twice weekly	OR	Daily
INH - 15 mg/kg p.o. (for individuals weighing > 120 percent of ideal weight use ideal body estimates - a simple formula is 100 lbs. for first 5 feet, for women add 5 lbs./each inch over 5 feet and for men add 7 lbs./each inch over 5 feet.)		INH - 10 mg/kg up to 300 mg p.o.
and		and
RMP - 10-20 mg/kg up to 600 mg p.o.		RMP - 600 mg p.o.

Regimen A should **not** be prescribed unless strict supervision of therapy is possible.

B. Alternate regimen of:

INH, RMP, and PZA or SM daily for eight weeks followed by INH and RMP daily or twice weekly for an additional seven months. Supervision of chemotherapy is recommended.

C. Special Considerations

1. Drug resistance

If resistance to INH or SM is suspected (for example, because of a history of inadequate treatment, exposure to drug-resistant tuberculosis, or patient comes from an area of the world where resistant tuberculosis is prevalent), regimen A, under strict supervision of therapy, should be started. If resistance is confirmed on culture, continue treatment with an appropriate multidrug ($\geq$ 3 drugs) therapy for a **minimum** of 9 to 12 months.

2. Extrapulmonary disease

Either regimen A or B may be used.

3. Tuberculosis in children

INH	10-20 mg/kg up to 300 mg p.o. Daily
RMP	10-20 mg/kg up to 600 mg p.o. Daily
PZA	25-30 mg/kg up to 2 gm p.o. Daily

INH, RMP, and PZA daily for eight weeks followed by INH and RIF daily or twice weekly for seven months.

4. Tuberculosis in pregnancy

Tuberculosis disease diagnosed during pregnancy should be treated without delay.

Recommended regimen:

INH	10-20 mg/kg up to 300 mg p.o. Daily
RMP	10-20 mg/kg up to 600 mg p.o. Daily
Ethambutol (EMB)	15 mg/kg (pre pregnancy weight) Daily

For eight weeks followed by INH and RMP **daily** for seven months. SM, PZA, and ethionamide should be avoided during pregnancy because of potential toxic effects on the fetus.

5. Hepatic disease

> "Mild dysfunction (e.g. alcoholism) does not necessarily influence the choice of drugs. However, monitoring of hepatic function is important. Elevations in the concentration of serum glutamic - oxaloactic transaminase (SGOT) or serum glutamic - pyruvic transaminase (SGPT) to three to five times normal should lead to a reassessment of the situation. Regimens may be continued, stopped, interrupted, or changed as a result of this assessment."[1]

D. Sputum Examination

At least three sputum specimens should be collected at least 24 hours apart before any drug regimen is initiated. In some cases when clinically warranted, the patient may be started on treatment and sputum specimens obtained during the first week of therapy. Drug sensitivities should be obtained on initial sputum specimens sent for culture but should not be ordered on subsequent specimens except as indicated below. Sputum specimens sent for smear examinations and cultures should be "deep cough" sputum, not saliva, and of a quantity equal to at least 5 ml. Sputum induction may be necessary to obtain a specimen of sufficient quality and quantity.

Sputum specimens should be collected at the third and sixth month to assess the efficacy of the drug regimen. Positive culture results after three months of chemotherapy may suggest the possibility of treatment failure due to drug resistance or to noncompliance. Under these circumstances, the following are recommended:

1. **Never add only one drug to a failing regimen.**
2. Order repeat drug susceptibility studies.
3. Add or substitute **at least two new drugs** to which the organisms are known to be sensitive.
4. Monitor by sputum smear and culture on a monthly basis.

E. X-ray Examination

1. All persons being evaluated for possible tuberculosis should have an initial chest x-ray.

2. The physician may obtain a chest x-ray at the end of the course of therapy. Routine, periodic x-ray examinations during the course of treatment are not recommended.

   The following are the statements of the U.S. Public Health Service regarding x-ray examinations during and following tuberculosis treatment:

   "Routine Followup of Tuberculosis Patients Who Have Completed Treatment

   Repeated chest x-ray examinations of asymptomatic tuberculosis patients who have completed treatment have been shown to be of insufficient clinical value or productivity to justify their continued use.

   Routine Periodic Chest X-Ray Examinations During Tuberculosis Treatment

   Radiographic stability does not necessarily indicate success or failure of chemotherapy as reliably as the results of sputum smear and culture, and assessment of symptoms and clinical status. However, an occasional x-ray examination may have value in confirming bacteriologic and clinical findings and enhancing patient compliance."[2]

3. Periodic x-rays may have clinical usefulness in monitoring response to treatment in tuberculosis cases who were smear and culture negative pretreatment.

F. Monitoring for side effects of medications

1. Obtain pretreatment baseline studies as follows:

   a) In patients suspected of having hepatic disease, renal disease or gout, obtain liver function tests, creatinine, or uric acid respectively.

b) In patients receiving streptomycin, obtain baseline audiogram.

c) In patients receiving ethambutol, obtain baseline visual acuity and red/green color discrimination.

2. In each of the above circumstances, the patient should be monitored with repeat studies on a monthly basis.

3. In all other cases, laboratory studies should be obtained any time signs or symptoms suggesting adverse drug rections are present.

1 Chest 87,(1985) (Supplement).

2 The Selection of Patients for X-Ray Examinations: Chest X-Ray Screening Chest X-Ray Screening Examinations, U.S. Department of Health and Human Services, Public Service, August 1983.

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DEPARTMENT OF HEALTH AND MENTAL HYGIENE
GUIDELINES FOR TUBERCULOSIS CONTROL

PREVENTIVE THERAPY

I. INTRODUCTION

The following are minimum recommendations for the State of Maryland. A Health Officer or Medical Director of an institution may establish more stringent guidelines for defined subpopulations.

The majority of new cases of tuberculosis come from the reservoir of people who were infected by tubercle bacilli in the past. It is our objective to prevent the progression to infectious tuberculosis.

II. PREVENTIVE THERAPY

Preventive therapy reduces the bacterial population in "healed" or roentgenographically invisible lesions of the person taking the drug. It is treatment of infection and can prevent the infection from progressing to tuberculosis.

Isoniazid (INH) is used for preventive therapy in a single daily dose of 300 mg for adults and a single daily dose of 10 mg per kg body weight, NOT to exceed 300 mg, for children. **The optimum duration for INH preventive therapy is 9 to 12 months.** In a household where the source case is on a shorter treatment regimen, this length of time may be impractical, and shorter durations are acceptable in the presence of normal x-ray results. Six months of **continuous** INH preventive therapy appears necessary to achieve a meaningful reduction in the risk of tuberculosis; therefore, public health agencies with limited resources should concentrate on assuring at **least** six months of INH preventive therapy for persons for whom it is indicated.

III. PRIORITIES

The results of a recent trial completed by the International Union Against Tuberculous (1) emphasized the need for preventive therapy in individuals with fibrotic lesions for a period of **at least** six months. **Since resources are limited for follow-up of noncompliant patients on INH preventive therapy, higher priority should be given to locate high-risk reactors who have received less than six months of preventive therapy.**

IV. SUMMARY

Preventive therapy is recommended for the following populations for a **minimum** of six months but **not longer** than 12 months.

A. Close contacts with reactions 5mm or greater, regardless of age.

B. Significant reactors with stable chest x-rays showing minimal fibrotic lesions.

C. Newly infected reactors with documented conversion within the past 24 months.

D. Significant reactors with special conditions that increase the risk of developing tuberculosis.

E. Significant reactors 35 years old or younger.

F. Contacts under age six.

Health personnel should alert persons with medical contraindications to INH to seek medical care immediately for symptoms suggestive of tuberculosis.

V. SCREENING PROCEDURES

Before preventive therapy is started, the following screening procedures should be performed:

A. In significant reactors, rule out clinical disease with a chest x-ray and bacteriological studies if indicated.

B. Question for history of previous adequate treatment for infection or disease.

C. Ascertain the presence of contraindications to INH which are:

1. **Not to treat with a single drug (INH) if tuberculosis is suspected and smear and culture results on sputum specimens are pending.**

2. Previous severe adverse reactions to INH including previous INH associated hepatic injury.

3. Active liver disease of any etiology.

D. The following special situations may require closer evaluation and monitoring:

1. Concurrent use of other drugs for possible drug interactions, e.g., dilantin, antabuse.

2. Heavy or daily alcohol intake or drug abuse.

3. Pregnancy: Although there is no evidence that isoniazid harms the fetus, it is generally prudent to defer preventive therapy until after delivery, primarily for medicolegal reasons. A possible exception concerns close contacts to smear-positive cases and tuberculin converters, both of whom have relatively high risks of developing disease within the first year. In such instances, preventing disease in the mother will prevent exposure to the infant. In other positive reactors, although the lifetime risk may be appreciable, the risk during 6 to 9 months is very low.

4. Nursing mothers: preventive therapy is not contraindicated.

5. Age- see section VI, 5.

VI. INDICATIONS FOR PREVENTIVE THERAPY

A. A contact is a person of any age who has been in close association with a source case for a length of time sufficient to be at risk of infection with M. tuberculosis.

1. Classification of contacts

a) Close contacts (high risk)--any individual found to have shared the same air space with a sputum positive source for a sustained period of time. Members of the immediate household fall into this catagory as may other groups, such as close work, school, or social contacts.

b) If close contacts do not show a high rate of infection, it is unnecessary to extend skin testing to casual contacts.

c) Casual contacts (low-risk)--while it is known that tuberculosis can be transmitted during a brief exposure, the probability is low, and investigation of these contacts should be deferred until contacts in the high-risk group have been evaluated.

2. INH Preventive Therapy

a) All close contacts should be examined. Those diagnosed as having tuberculosis disease should be treated with multiple drug therapy.

b) Close contacts of smear positive cases should be treated as follows:

(1) Close contacts of a smear positive source case who exhibit skin test results of 5mm or greater are treated with INH regardless of age for a minimum of six months but not longer than 12 months.

(2) Close contacts of a smear positive source case who exhibit skin test results of less than 5mm are provided INH preventive therapy based on age. For adult patients, repeat the tuberculin skin test at the end of 3 months. Those whose skin tests convert should be treated with INH as in (1) above regardless of age.

Children, particularly the very young, are at increased risk of developing severe tuberculosis disease including meningitis and miliary disease when infected, therefore, they are treated somewhat differently. Two acceptable options exist.

OPTION 1 - Start INH 10mg/kg (up to 300mg) daily and repeat the skin test at the end of 3 months. If skin test has remained nonsignificant and the exposure has ended, discontinue the INH. If skin test has converted, rule out clinical disease and continue INH for a total of a minimum of six months and not longer than twelve months.

The rationale behind this option is to start preventive therapy as early as possible in children who are recently infected and have not as yet converted their skin tests. Those who fail to convert their skin tests are assumed to have never been infected.

OPTION 2 - For children over six years of age, repeat skin test at the end of 3 months, and if skin test has converted to ≥ 5mm of induration, treat with INH 10mg/kg (up to 300 mg) daily for a **minimum** of six months and **not longer** than 12 months. For children less than six years of age, treat with a INH 10mg/kg (up to 300mg) daily for **minimum** of six months and **not longer** than twelve months.

The rationale behind this regimen is that very young children who are recently infected would be at greatest risk of meningitis or miliary disease and that treatment with INH very early in the course of infection in this group may actually prevent the development of a significant skin test reaction or cause the reversion to nonsignificant of a skin test reaction when the point in time of conversion was missed.

(3) If the source case of a close contact is smear negative and the skin test reading is 5mm or greater, INH is indicated for a **minimum** of six months but **not longer** than 12 months regardless of age. If the skin test reading is less than 5mm, no INH is indicated regardless of age. The skin test is repeated in three months. At that time, if the skin test is 5mm or greater, INH is indicated for a **minimum** of six months but **not longer** than 12 months. If the reading is less than 5mm, no INH is indicated.

(4) One should remember that special circumstances/ occasions merit individualized attention and treatment regimens.

B. Significant reactors with chest x-rays suggestive of old tuberculosis not adequately treated or with abnormal findings need to be considered on an individual basis before the start of a preventive therapy regimen. Preventive therapy should not be considered without ruling out active tuberculosis. A single chest x-ray may be insufficient to determine disease activity; therefore, sputum analysis is generally necessary to confirm or rule out active tuberculosis. The physician should exercise judgment based on a combination of data. The important caveat is to **avoid treating tuberculosis disease with a single drug.** If preventive therapy is indicated, INH should be given for a minimum of six months and not longer than 12 months. The annual risk of developing disease in such individuals if untreated, can range between 1.0 and 4.5 percent.

C. Recent converters - a recent converter is defined as a person whose tuberculin skin test was nonsignificant within the past 24 months, and whose present skin test has increased by at least 6mm and is now 10mm or greater. Recent converters should receive preventive therapy for a **minimum** of six months but **not longer** than 12 months regardless of age.

D. Significant reactors with the following special clinical conditions are at increased risk of developing disease and should be on preventive therapy a **minimum** of six months but **not longer** than 12 months.

1. Regardless of age

   a) Hematologic or reticuloendothelial malignant neoplasm

   b) Adults on systemic corticosteroids with dosages equivalent to 15 **mg**/day of prednisone for a period exceeding three months or other immunosuppressive therapy

   c) Silicosis

   d) Renal dialysis

   e) Insulin dependent or poorly controlled Diabetes Mellitus

   f) Conditions associated with nutritional deficiency with a substantial loss of 10 to 15 percent below ideal body weight including gastrectomy and intestinal bypass

2. Up to age 35

   a) Intravenous drug abusers

   b) Special populations where the prevalence of tuberculosis is three times greater than in Maryland such as immigrants from Africa, Latin America, and Asia

E. 1. Significant reactors 18 years old and younger - among tuberculin reactors in this group, the benefit of preventive therapy outweighs the risk of INH associated hepatitis, and preventive therapy is recommended for a **minimum** of six months but **not longer** than 12 months.

2. INH is recommended for the age groups 18 to 35. In this time of finite resources in public health, the benefits of preventive therapy must be weighed against competing demands for health services. Public health agencies may elect to refer members of this group to the private sector for care.

3. For individuals over 35 years old, the risk of INH-associated hepatitis is significant (up to 1.2 percent), while the risk of developing tuberculosis is low. Preventive therapy is not recommended for significant reactors in this age group unless one of the risk factors listed above is also present.

F. Infection with isoniazid-resistant organisms presents special problems. When the likelihood of tuberculosis infection with isoniazid-resistant organisms is strong, especially when additional high-risk factors are present, preventive treatment with rifampin may be used. The duration of rifampin should be at least six months, but not longer than 12 months in a dose of 10mg/kg up to 600mg a day.

G. When there is a history of BCG immunization in the presence of a significant tuberculin skin reaction, INH preventive therapy should be prescribed without considering the influence of this immunization on the specificity of the reaction. In other words, ignore the previous BCG immunization history.

H. Pyridoxine 25 to 50 mg/day should be given concurrently with INH preventive therapy in the following circumstances:

1. undernutrition

2. seizure disorders

3. chronic renal disease

4. estrogenic-containing oral contraceptives

5. chronic liver disease

VII. MONITORING PROCEDURES

Individuals receiving preventive therapy should be interviewed carefully at monthly intervals for:

A. Symptoms consistent with liver damage or other toxic effects: loss of appetite, fatigue, nausea, paresthesia of hands or feet.

B. Signs consistent with liver damage or other toxic effects: dark urine, jaundice, rash, elevated temperature.

Individuals should be advised that, **on development of such signs and symptoms, they should immediately discontinue the drug and report to the health provider for evaluation.**

Monitoring by routine laboratory test is not recommended. However, in evaluating signs and symptoms, **such tests are mandatory.**

Routine monitoring should be on a monthly basis. No individual should receive more than two months' supply of INH at any time. Some exceptions can be made on an individual basis and may include when individuals go out of state or are at school or cannot meet a specific date. In any case **never** more than two months' supply should be given. **Monthly monitoring is still essential.**

Routine chest x-rays during and following the INH preventive treatment regimen are unnecessary.

1. International Union Against Tuberculosis, Committee on Prophylaxis. Efficacy of various durations of isoniazid prevention therapy for tuberculosis (in years of follow-up in the IUAT trial). Bull, WHO 1982; 60:555-64



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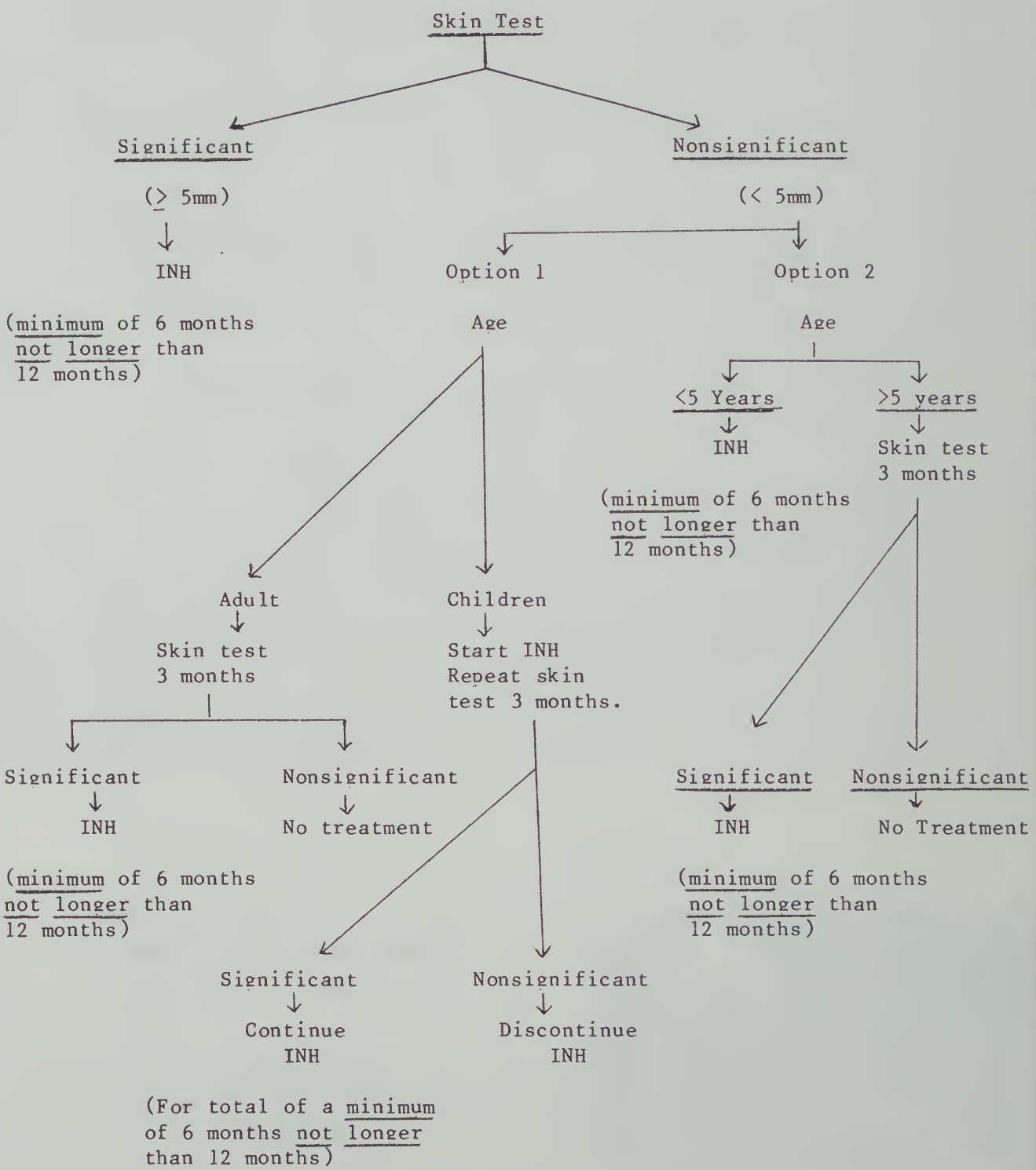
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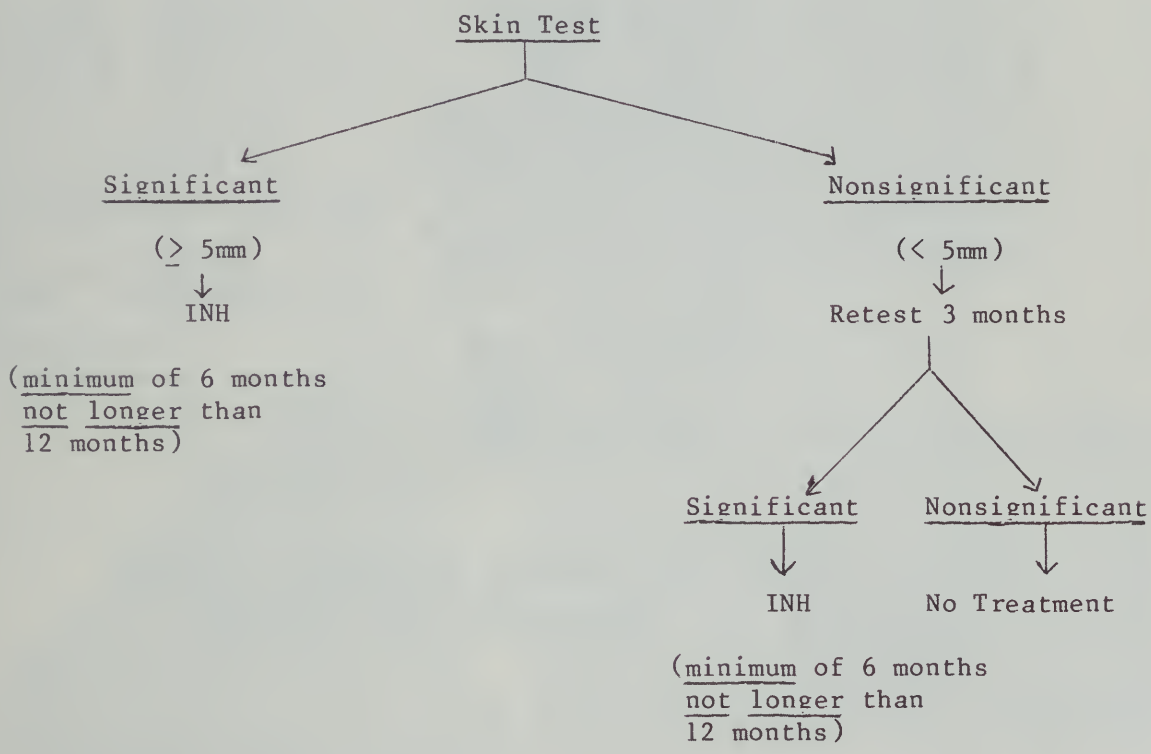
PREVENTIVE THERAPY

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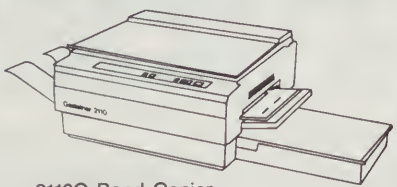
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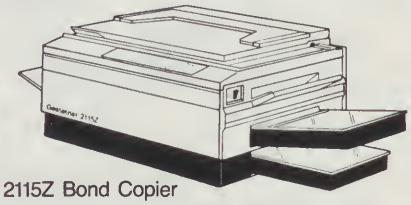
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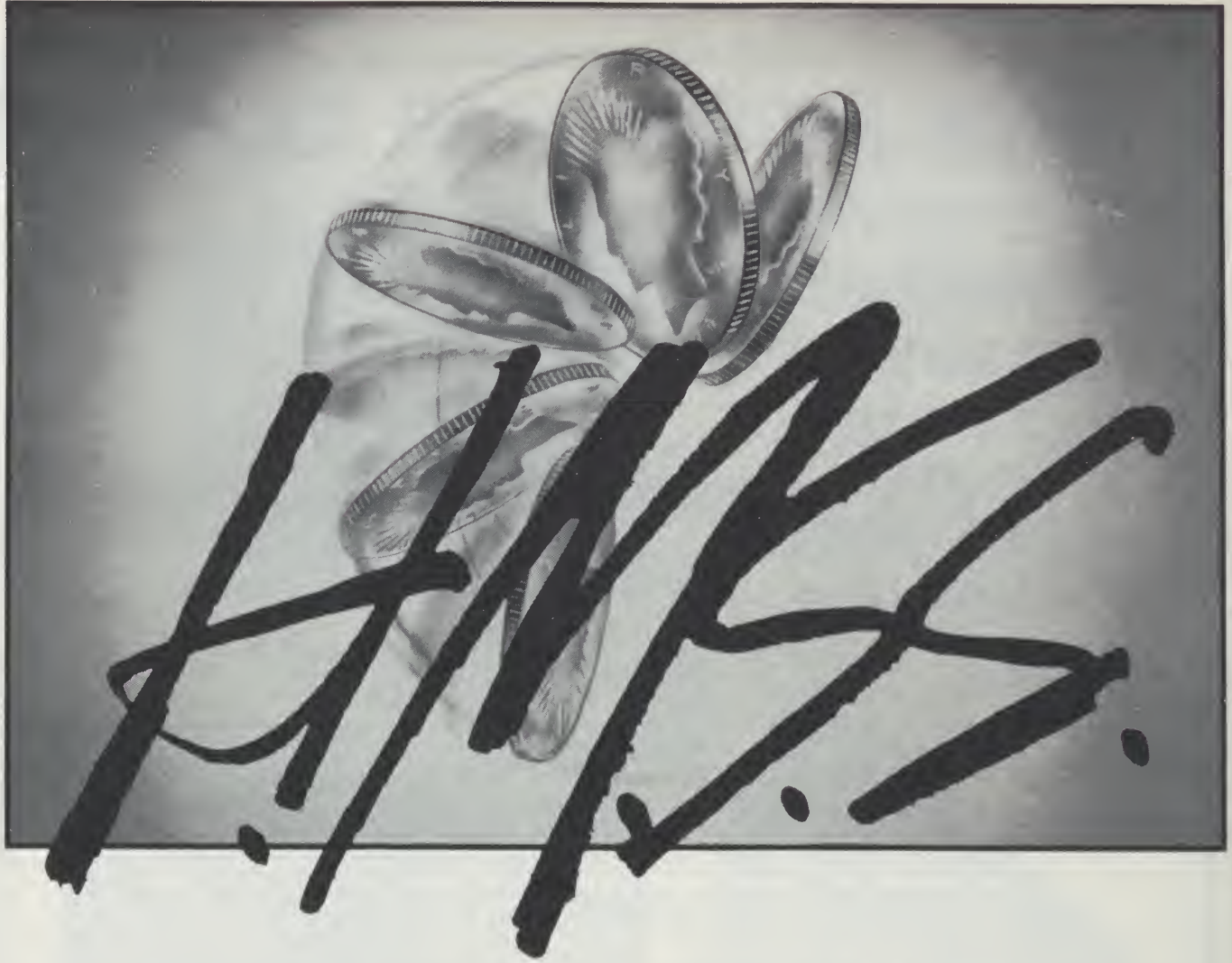


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MIEMSS: Topics of Interest

Splenic Rupture in a Very Low Birth Weight Infant

HOWARD J. BIRENBAUM MD, ARTHUR L. MACARAEG MD, BENSON M. SILVERMAN MD, and MARK D. HARRIS MD

Rupture of the normal spleen in a newborn is a very rare but potentially life-threatening event that may be amenable to surgical correction. Following a case report of a 690 g infant who developed splenic rupture after a nontraumatic delivery is a brief review of the literature.

St. Agnes Hospital is one of the neonatal specialty referral centers in the Maryland Emergency Medical Services System. This article is from the Department of Pediatrics, Division of Neonatology, St. Agnes Hospital, 900 Caton Avenue, Baltimore, MD 21229.

Dr. Birenbaum is Attending Neonatologist, Dr. Macaraeg is with the Division of Neonatology, Dr. Silverman is a Fellow in Neonatology, and Dr. Harris is a Resident.

Rupture of the spleen is a rare cause of intra-abdominal hemorrhage in the newborn. It has been described following atraumatic delivery,[1] traumatic delivery,[2] and in utero trauma prior to delivery,[3] as well as in association with syphilis and erythroblastosis fetalis. To our knowledge, there has not been a report of the rupture of a normal spleen in a premature infant following a nontraumatic delivery, as described in this article.

Case Report

This infant was the 690 g female product of a 24-week gestation by dates, born by spontaneous vaginal delivery to a 27-year-old white female (gravida 2, para 0) with O^+ blood and a negative serologic test for syphilis. Delivery was precipitous, occurring approximately 15 minutes after spontaneous rupture of the membranes. The mother had been in labor only 18 minutes. The Apgar scores were 4 and 5 at one and five minutes, respectively. The infant was intubated without difficulty immediately after delivery and placed on a ventilator with initial settings of FiO_2 of 0.5, respiratory rate of 50, and pressures of 16/4 cm H_2O. The initial blood gas evaluation revealed a pH of 7.34, pCO_2 of 40, and pO_2 of 50.

On physical examination, the infant was determined to be of approximately 28 weeks' gestation, small for gestational age on the basis of Dubowitz examination. The physical examination was remarkable for a bruised occiput. The eyes were open, and the corneas were clear. The chest was symmetrical with bilateral intercostal retractions, but there was good expansion of the chest on the ventilator. The lungs were clear. Cardiovascular examination was unremarkable. Abdominal examination was negative for masses or enlarged liver or spleen. The extremities were normal, and the initial neurological examination was normal.

Initially, umbilical artery and umbilical vein catheters were placed, both in good position, above the diaphragm. The infant's blood type was O^+, the initial hematocrit was 49 percent, and the platelet count was 245,000/mm^3. Because of an initial blood pressure of 27/18 mmHg, the infant was given 10 cc/kg of 5 percent albumin by slow intravenous infusion. This raised the blood pressure to 35/22, which remained stable until approximately 30 hours of life. During the next 25 hours, the infant was able to be weaned from the ventilator so that the FiO_2 requirement had been reduced to 0.37, pressures had been reduced to 18/4 cm H_2O, with a breath rate of 25. A representative arterial blood gas of pH 7.36, pCO_2 of 36, and pO_2 of 74 was obtained.

At about 30 hours of age, the infant appeared pale and had a declining blood pressure. The abdomen was bluish and increased in girth. A repeat arterial blood gas revealed a severe metabolic acidosis with a pH of 7.08, pCO_2 of 15, and pO_2 of 189, with a base deficit of 24 mEq/liter. Her acidosis was corrected with sodium bicarbonate via slow intravenous infusion. Bradycardia developed, for which she received packed red blood cells for presumed intra-abdominal hemorrhage. A CBC done prior to the transfusion of packed cells revealed a hematocrit of 30 percent. The metabolic acidosis worsened and became unresponsive to alkali infusion. Hypotension developed and was unresponsive to dopamine infusion. The baby developed bradycardia, which was unresponsive to resuscitative efforts. A blood culture at 24 hours of life showed no growth. A chest x-ray and abdominal flat plate were negative for both pneumothorax and pneumoperitoneum, and the bowel gas pattern appeared normal.

The infant suffered cardiac arrest as an abdominal paracentesis was about to be performed and could not be resuscitated. The child did receive cardiac compressions during resuscitation; however, this followed abnormal distention and discoloration of the abdomen. At no time were needles inserted into the abdomen for paracentesis or into the heart for resuscitation.

A spun hematocrit measured after the infant's demise, but obtained just prior to her death, revealed a hematocrit of 5 percent. Clotting function studies were not performed prior to the infant's death. On postmortem examination, a 2-cm laceration of the splenic cap-

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sule was found. The only other site of bleeding was a Grade II intraventricular hemorrhage, with no evidence of ventricular dilatation. All other viscera were normal. Approximately 20 ml of blood (40 to 50 percent of the infant's total blood volume) was found in the peritoneum. A small subcapsular hematoma was present in the liver. There was no evidence of thrombosis of the splenic or portal vascular system.

Discussion

This case represents what we believe to be the first description of the rupture of an apparently normal spleen in a premature infant following vaginal delivery. All other references in the literature, to our knowledge, describe splenic rupture in term infants or in the presence of disease such as erythroblastosis fetalis or syphilis.

Splenic rupture is a very rare event, even in large newborns. In an analysis of 2000 autopsies, Potter[4] described a 14.3 percent incidence of traumatic hemorrhage. Of these 274 infants, there were 28 cases of laceration of abdominal viscera, 24 of which involved the liver and four of which involved the adrenals. The spleen was not involved in any of these cases. Gruenwald,[5] in a review of 121 autopsies, summarized eight cases of splenic rupture in infants larger than 3140 g. In no case was diagnosis of intra-abdominal hemorrhage made during life. Philipsborn *et al.*[6] reported four cases of splenic rupture in infants with erythroblastosis fetalis; all were of large birth weight.

The clinical signs and symptoms of intra-abdominal hemorrhage in a neonate defy classification and require a high index of suspicion.[1] The clinical triad most often used is that of unexplained blood loss associated with abdominal distention and presence of intraperitoneal effusion on x-ray without pneumoperitoneum.[7] Often, these signs and symptoms are not recognized before the onset of severe complication or death.

Several etiologies for rupture of the spleen have been proposed. These include clotting defect, hemorrhagic tendency, erythroblastosis fetalis, syphilis, and trauma.[1-8] Sieber and Girandy[8] reported three cases of survival following splenic rupture in neonates. All infants were term, and two were born by spontaneous vaginal delivery. In one case, there may have been a clotting defect. In this infant's case clotting studies were not performed, nor are they performed as a routine. The 2 cc of blood required to assess PT and PTT would represent about 5 percent of this infant's blood volume. Given that the infant was not clinically bleeding from puncture sites for arterial blood gases or for the insertion of peripheral venous catheters, a PT-PTT was not clinically warranted.

Eraklis[1] described four cases of abdominal bleeding without trauma (save that of delivery), two of which involved the spleen; in one case, true hemophilia was diagnosed. The exact pathogenesis in Rh disease is believed to revolve around increased extramedullary hematopoiesis and increased phagocytosis, which in combination produce increased size of the spleen and capsular distention, as well as weakness of the supporting structures.[6]

Normal labor and delivery do not exclude the diagnosis of intra-abdominal trauma. Rothenberger[3] described in utero trauma 10 days prior to delivery in a 25-year-old female who was involved in an auto accident. Her infant had splenic rupture.

The pathogenesis of splenic rupture following delivery also is not clear. Gruenwald[5] proposed that compression of the thoracic cage with downward displacement of the spleen, as well as downward displacement and tension of the phrenicolienal ligament, accounts for laceration and rupture rather than direct injury to the abdomen itself. Others have proposed that the splenic rupture occurs in two stages: the formation of a subcapsular hematoma followed by urgent symptoms that occur only when the capsule eventually gives way.[7]

By 1976, only 24 survivors of splenic rupture in the newborn had been reported in the world literature; all were treated by splenectomy. Matsuyama reported the first case of survival of a 3.9 kg infant with splenic rupture after repair of the laceration without splenectomy.[9] Repair of splenic laceration, rather than performing splenectomy, has taken on new importance since it has been found that splenectomy may predispose the young child to overwhelming pneumococcal sepsis.

It only can be speculated whether prompt surgical intervention might have prevented the death of the infant described in this report. Survival would be more likely in the case of a 1000 or 1500 g premature infant. Splenic rupture in a neonate can occur in any birth weight category or at any gestational age, even when delivery is atraumatic.

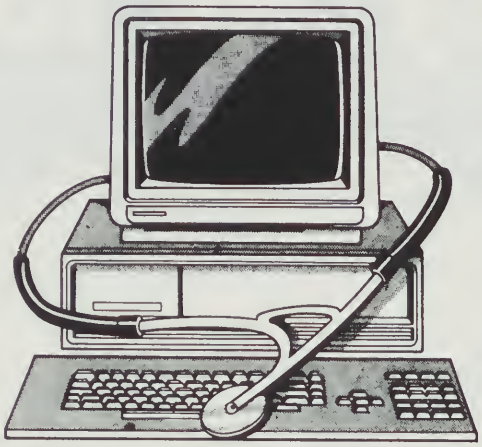
References

1. Eraklis, A.J. "Abdominal Injury Related to the Trauma of Birth." *Pediatrics* 39(1967):421–24.
2. Delta, B.G.; Eisenstein, E.M.; and Rothenberg, A.M. "Rupture of a Normal Spleen in the Newborn: Report of a Survival and Review of the Literature." *Clin Pediatr* 7(1968):373–76.
3. Rothenberger, D.A.; Horrigan, T.P.; and Sturm, J.T. "Neonatal Death Following In Utero Traumatic Splenic Rupture." *J Pediatr Surg* 16(1981):754–55.
4. Potter, E.L. "Fetal and Neonatal Deaths: A Statistical Analysis of 2,000 Autopsies." *JAMA* 115(1940):996.
5. Gruenwald, P. "Rupture of Liver and Spleen in the Newborn Infant." *J Pediatr* 33(1948):195.
6. Philipsborn, H.F.; Traisman, H.S.; and Greer, D., Jr. "Rupture of the Spleen: A Complication of Erythroblastosis Fetalis." *N Engl J Med* 252(1956):159–62.
7. Chryss, C. and Aaron, W.S. "Successful Treatment of Rupture of Normal Spleen in Newborn." *Am J Dis Child* 134(1980):418–19.
8. Sieber, W.K. and Girandy, B.R. "Rupture of the Spleen in Newborn Infants—Recovery after Splenectomy." *N Engl J Med* 259(1958):1074–76.
9. Matsuyama, S.; Suzuki, N.; and Nagamachi, Y. "Rupture of the Spleen in the Newborn: Treatment without Splenectomy." *J Pediatr Surg* 11(1976):115–16.

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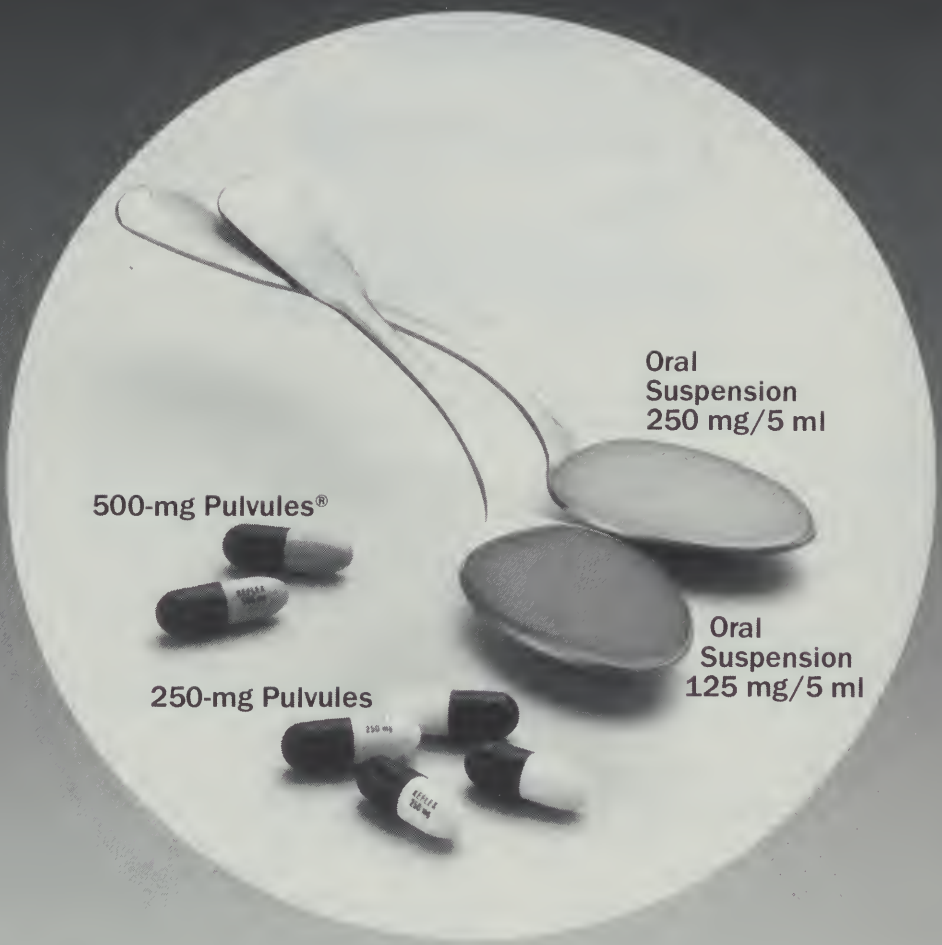
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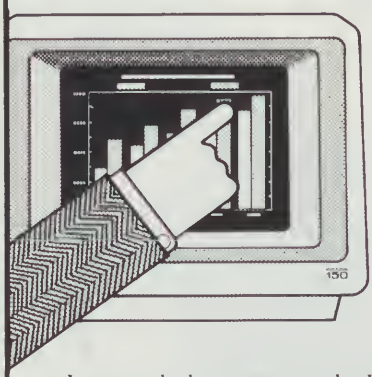
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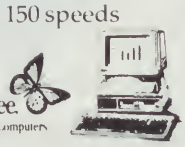
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Members in the News

Joseph J. McDonald MD
1920–1985

Joseph J. McDonald MD, who practiced pediatrics in Prince George's County for more than 30 years, died at University of Maryland Hospital in Baltimore, of internal injuries after a fall at his home in Annapolis, on December 1, 1985. He retired from full-time practice in 1980. Dr. McDonald, a native Washingtonian, graduated from Georgetown University Medical School in 1945 and had his pediatric residency at Childrens Hospital and D.C. General after WWII. He was Captain in the U.S. Army Medical Corps 1946–48.

Dr. McDonald was Associate Professor of Pediatrics at Georgetown University Medical School, Vice-Chairman of the Maryland Chapter, American Academy of Pediatrics, 1980-83 and was former Chief of Pediatrics at Providence Hospital in Washington, D.C. He received the "Pediatrician of the Year" award in Prince George's-Montgomery County in 1979.

Leon Reinstein MD has joined Sinai's Department of Rehabilitation Medicine as associate chief. His primary responsibility is for the inpatient rehabilitation medicine bed service.

Dr. Reinstein had been acting chairman of the department of rehabilitation medicine at University of Maryland Hospital since 1983 and chief of amputee and prosthetic services there since 1975. He also had held the position of medical director of rehabilitation medicine at Mercy Hospital since 1977. Prior to that he was associated with the rehabilitation department of Thomas Jefferson University Hospital in Philadelphia and was a consultant to the Albert Einstein Medical Center-Daroff division there.

A native of Baltimore, Dr. Reinstein received his MD degree from the University of Maryland. He did internship at York Hospital in Pennsylvania and his residency in physical medicine and rehabilitation at Temple University in Philadelphia.

• • •

The Baltimore County Medical Association installed the following members as officers for 1986: President **Thomas E. Allen** MD, a member of the medical staff of St. Joseph Hospital; President Elect **Bernard Kleiman** MD, a past president of the St. Joseph Medical Staff and a member of the Board of Governors since 1982; Vice-President **Abe Ghiladi** MD, whose hospital affiliations include St. Joseph, Baltimore County General, and Greater Baltimore Medical Center; Treasurer **Esther Edery** MD, a member of the medical staff of St. Joseph Hospital and Greater Baltimore Medical Center; and Secretary **Philip Ferris** MD, Chairman of the Department of Surgery at Franklin Square Hospital.

• • •

The following officers for 1986 have been duly elected for the Charles County Medical Society: President **Henry L. Burke** MD, Vice-President **G. Shankar Rath** MD, Secretary/Treasurer **Guillermo E. Sanchez** MD.

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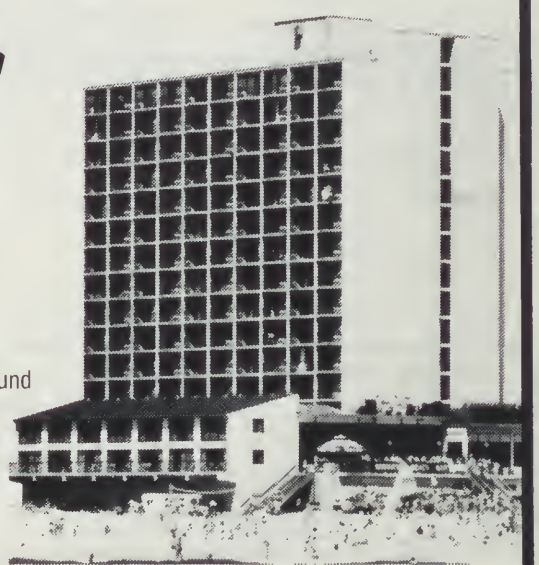
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INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or ot the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node retractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use ot diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects ot concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging trom five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, betore meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

CARDIZEM 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles ot 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other. Issued 4/1/84

See complete Professional Use Information before prescribing.

0642T5

References: 1. *Physicians' Desk Reference®*, ed 39. Oradell, NJ, Medical Economics Company Inc, 1985. **2.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **3.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982; 50(Sept):94-116. **4.** Subramanian VB: Comparative evaluation of four calcium antagonists and propranolol with placebo in patients with chronic stable angina. *Cardiovasc Rev Rep* 1984; 5:91-104. **5.** Schroeder JS, Feldman RL, Giles TD, et al: Multiclinic controlled trial of diltiazem for Prinzmetal's angina. *Am J Med* 1982; 72:227-231. **6.** Weiner DA, McCabe CH, Cutler SS, et al: The efficacy and safety of high-dose verapamil and diltiazem in the long-term treatment of stable exertional angina. *Clin Cardiol* 1985; 7:648-653. **7.** Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. *Consultant* 1984; 24(Dec):150-159.

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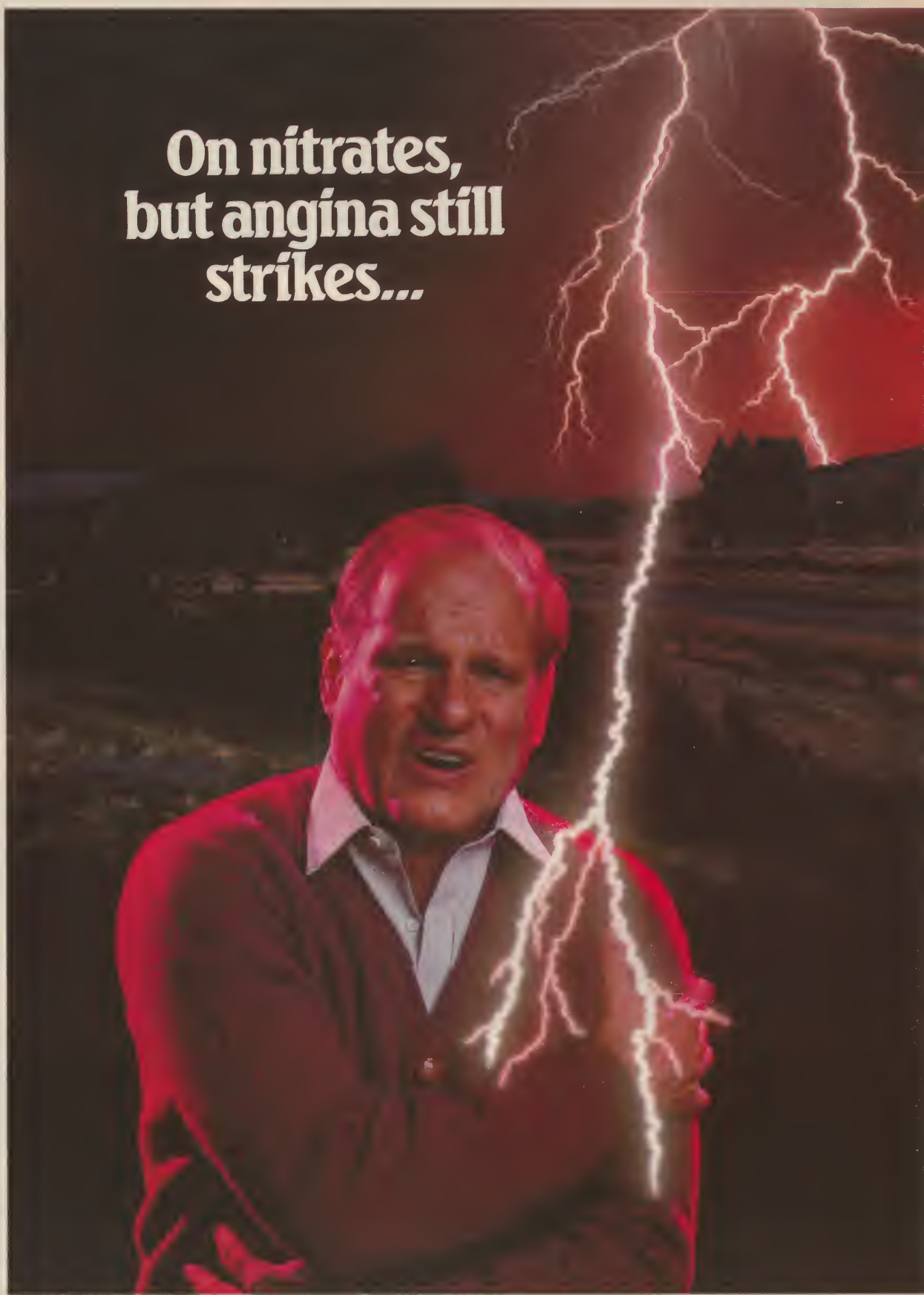
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Contraindications: Severe left ventricular dysfunction (see *Warnings),* hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.)* Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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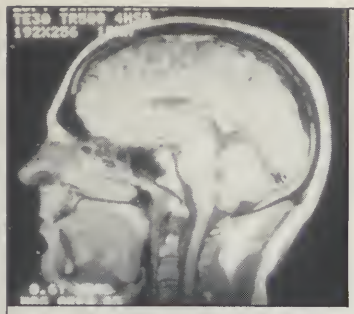
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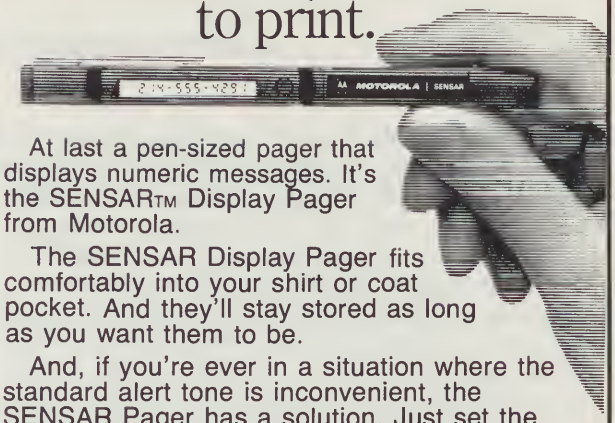
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Auxiliary

Legislation Key to Medical Liability Crisis

Maryland auxiliaries and medical societies on both the county and state levels as well as Marylanders for Malpractice Liability Reform (MMLR), a coalition to lower medical costs for Marylanders, have been involved in a crisis situation that has touched many physicians and their families. That crisis is, in part, caused by the increasing cost of liability insurance for the medical profession, particularly those in high-risk specialties who perform essential human services for many people. MMLR is working to increase the awareness of physicians and consumers in the state and to prepare them to take an active role in the legislative process during the 1986 General Assembly session. The legislative process offers the most hope for resolving the medical liability problem.

The State Auxiliary's Winter Board Meeting, chaired by President Kathy Karpers, held at the Hampton Mansion in January, featured guest speaker William H.M. Finney MD, President of MMLR. Dr. Finney spoke on the 11 issues to be submitted for consideration by legislators. Three key issues are the change in the collaterals source rule, the cap on noneconomic loss, and the expert witnesses. Also discussed were the high cost and frequency of litigation, the practice of defensive medicine, and the entitlement attitude of the American consumer.

MMLR also sponsored a Legislative Workshop in January at the Legislative Services Building in Annapolis. About 450 physicians and spouses attended this worthwhile session and heard speakers including Lieut. Governor Joseph Curran, Senator Melvin A. Steinberg, Delegate Benjamin Cardin. MMLR also sponsored "Legislative Day" in Annapolis in February.

Mary Skipton, Auxiliary Legislative Chairman, planned a special day for the Auxiliary in Annapolis in January. The Baltimore County Auxiliary also enjoyed a day in Annapolis with Delegate Martha Klima.

Doctors are practicing "defensive" medicine by ordering more laboratory tests and using consultations that result in higher medical bills for patients. Obstetricians are especially hurt by the increase in insurance premiums, and in some cases, they are actually losing insurance coverage. In 1985, 12 percent of Maryland obstetricians withdrew from practice, and another 13 percent are expected to do so in 1986.

Many physicians are opting for early retirement because of malpractice pressures.There is the intangible cost of physician stress and dysfunction due to emotional injury, once a claim is filed. The litigation process is agonizing and stressful despite the fact that 81 percent of physicians who go to trial are vindicated.

The most important thing we can do as members of the medical community is to write or visit our Senators and Delegates in Annapolis. Let your legislators know how the escalation of litigation against physicians is hurting your patients. If only a few physicians are heard, the message to legislators will be "The doctors don't really care about this." Delegate Martha Klima of Baltimore County emphasizes that legislators do take their mail seriously.

MARY SKIPTON, **Chairman**

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How to Contact Legislators

I. *Personal Visit is Most Effective Contact*
   A. When making a personal contact, it is sometimes best to call ahead to arrange a time and place (when visit is made in Annapolis). It is best to arrange this visit between the time the session ends and the time the committee goes into hearings.
      1. Visit representative at home when General Assembly is not in session.
      2. Arrange visit during the session.
      3. Visit is far more effective when several physicians or auxiliary members from delegate's or senator's district are present to discuss the bill.

II. *Contact by Telephone*
   A. In the event a personal contact is not possible, a phone call to one's representative is the next best measure.
      1. Legislator is more receptive to receiving a phone call from his/her personal physician.
      2. If your physician spouse is unable to talk to the delegate or senator personally, you may call on his/her behalf.
      3. Do *not* leave a message for the representative to return a phone call. It is preferable to leave any messages with his secretary.

III. *Contact by Telegram*
   A. Telegrams are a very effective means of communication with your representative.
      1. Must be marked—"Deliver Personally—Do Not Telephone."
      2. It is better to address the telegram in care of his committee for delivery, rather than to his senate or house office.

IV. *Contact by Letter*
   A. A letter is acceptable if no personal contact is possible and you are unable to verbalize issues through a phone conversation. However, letters are frequently not seen by delegates or senators as their secretaries handle their correspondence.
      1. No specific format for the letter should be used. It should be individually composed.
         a. Be concise and succinct in your statements.
         b. Do not be rude in letter or be so inconsiderate as to write on a scrap of paper or prescription blank.
      2. When sending a letter, be sure to send a copy to the committee chairman when the bill is being considered.
      3. Use points mentioned above on "the friendly art of persuasion."

V. *Points to Remember*
   A. Familiarize yourself with bill and subject to any contact.
   B. Remember, we are all flattered by personal contacts and being treated as an equal.
   C. Be prepared for any questions that may be asked about legislation.
   D. When discussing legislation
      1. Never try to make your arguments appear as though it is a personal issue for the benefit of the profession—point out the benefits to the public (or harm if that is the case). There are a lot more members of the citizenry than physicians, and each one has a vote.
      2. Discuss in a manner that will persuade the representative to act as we wish him/her to.
      3. Be reasonable; never threaten nor get angry.
   E. "Legislation is the art of compromise. Very often minor amendments will not harm the legislation, and will convert the legislator to your way of thinking."

In *MMJ* in June:

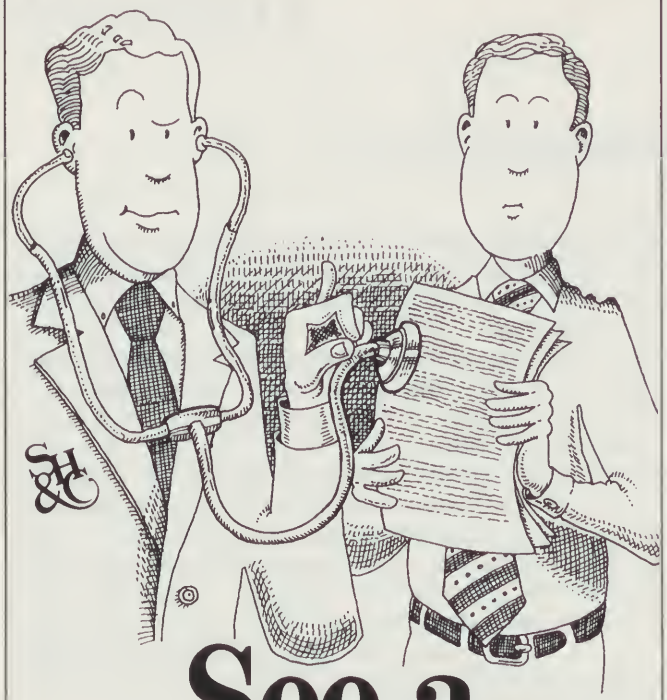
Autologous Transfusion: The Treatment of Choice—Ali Daneshvar MD

Postpartum Blood Pressure Patterns in Patients with Hypertensive Complications of Pregnancy—Selman I. Welt MD *et al.*

Closure in Biomedical Technology Assessment: Consenus Development—John T. Kalberer, Jr., PhD

Sarcoidosis: Diagnosis by Iris Biopsy—David C. Donovan MD and Joseph B. Aquilla MD

The Changing Clinical Program at Montebello: A Review of SCI Patients 1979–1984—J. Koval MD *et al.*



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All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985–86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Jun 6–7 Glaucoma '86. Hours of instruction: 10.

Jun 9–11 Toxicology Update '86. Info: J. Corn, The Johns Hopkins School of Hygiene and Public Health, 615 N. Wolfe St., Baltimore, MD 21205 (301-955-2609).

Jun 9–13 Basic Practicum in Diagnostic Ultrasound. Hours of instruction: 40.

Jun 19–20 National Conference on Alcoholism and Cardiovascular Disease.

Jun 10–12 Endoscopic Sinus Surgery, lecture series with practical laboratory sessions. Fee: $550 lab/lecture series; $265 for lectures only; 22 AMA Cat I credits for lab/lecture; 14 AMA Cat I credits for lectures only. Info: C. Kearney 301-955-3168.

Jul 14–18 Control of Biohazards in the Research Laboratory. Info: B. Tepper, Director, Safety & Environmental Health (301-955-5918) or J. Dorn, Director, Continuing Education Program (301-955-2609).

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/86. Info: J. Mosmiller 301-955-8450.

Basic Practicum May 19–23, Aug 11–15, Sep 22–26, Nov 17–21. Fee: $460; 40 AMA Cat I credits.

Advanced Obstetrics & Gynecology Nov 5–7. Fee: $325, 24 AMA Cat I credits.

Visiting Physicians offered weekly throughout the year for experience in the lab and participation in reading sessions. By appointment. Fee $460; 40 AMA Cat I credits.

Advanced Practicum by Ultrasound Jun 9–13. Fee: $460, 40 AMA Cat I credits.

Continuously throughout the year. One-week Microsurgery Training Course. Basic technique and principles, individualized instruction, and practice sessions. Fee: $1,200; 40 AMA Cat I credits. Info: Prog. Coord. 301-955-3169.

The Johns Hopkins Medical Grand Rounds. Accredited audiovisual subscription program for the practicing physician. 40 AMA Cat I credits/year. Write to the Johns Hopkins University School of Medicine, Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205 (301-955-3988).

• • •

University of Maryland School of Medicine

CME Courses: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Jun 22–27 12th Annual Family Medicine Review Course. Carousel Hotel, Ocean City. Fee: $350; special daily fee: $85; 25.75 AMA Cat I credits.

Oct thru May—Visiting Practitioner Preceptorship Program. Acceptance on approval of Departments. Hour-for-hour AMA Cat I credit.

All Year Departmental Rounds and Conferences. Held weekly by clinical departments. Hour-for-hour AMA Cat I credits.

Sep thru Jan—Visiting Professor Program— Lecturer/Topic directory available to hospitals and other health care organizations. An administrative fee is charged. Call for further information.

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Miscellaneous Meetings

May 27–31 Fifteenth Annual SCCM Educational and Scientific Symposium, Washington, DC. Fee: Nonmember physicians $375, nurses and therapists $270, member physicians $275, nurses and therapists $225; approx 40 Cat I credits. Info: T. Schultz 714-870-5243.

May 29–Jun 1 The Virginia Society of Ophthalmology Annual Meeting, The Omni International, Norfolk, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

May 30 Managing the Infected Patient: A Historical Perspective, a symposium, Suburban Hospital, Bethesda. Approved for CME Cat I credit. Info: J. Reavis 301-530-3869.

Jun 12–13 Principles and Applications of Epidemiology, University of Virginia Medical Center, Charlottesville. Fee: $65. Info: J. Jagger or C. Groah, Box 180, University of Virginia Medical Center, Charlottesville, VA 22908 (804-924-5159 or 924-5668).

Jun 25 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jun 26 Managing the Business Side, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jul 25–27 Eighth Annual Pediatrics at the Beach presented by the Department of Pediatrics, Children's Medical Center and the Office of Continuing Medical Education at the Medical College of Virginia, will be held at the Cavalier Resort Hotel in Virginia Beach. 12 AMA Cat I credits, 12 AAP PREP credits, 12 AAFP credits, and 1.2 CEU's from the Virginia Commonwealth University. Info: B. Winn, Box 48, MCV Station, Richmond, VA 23298-0001 (804-786-0494).

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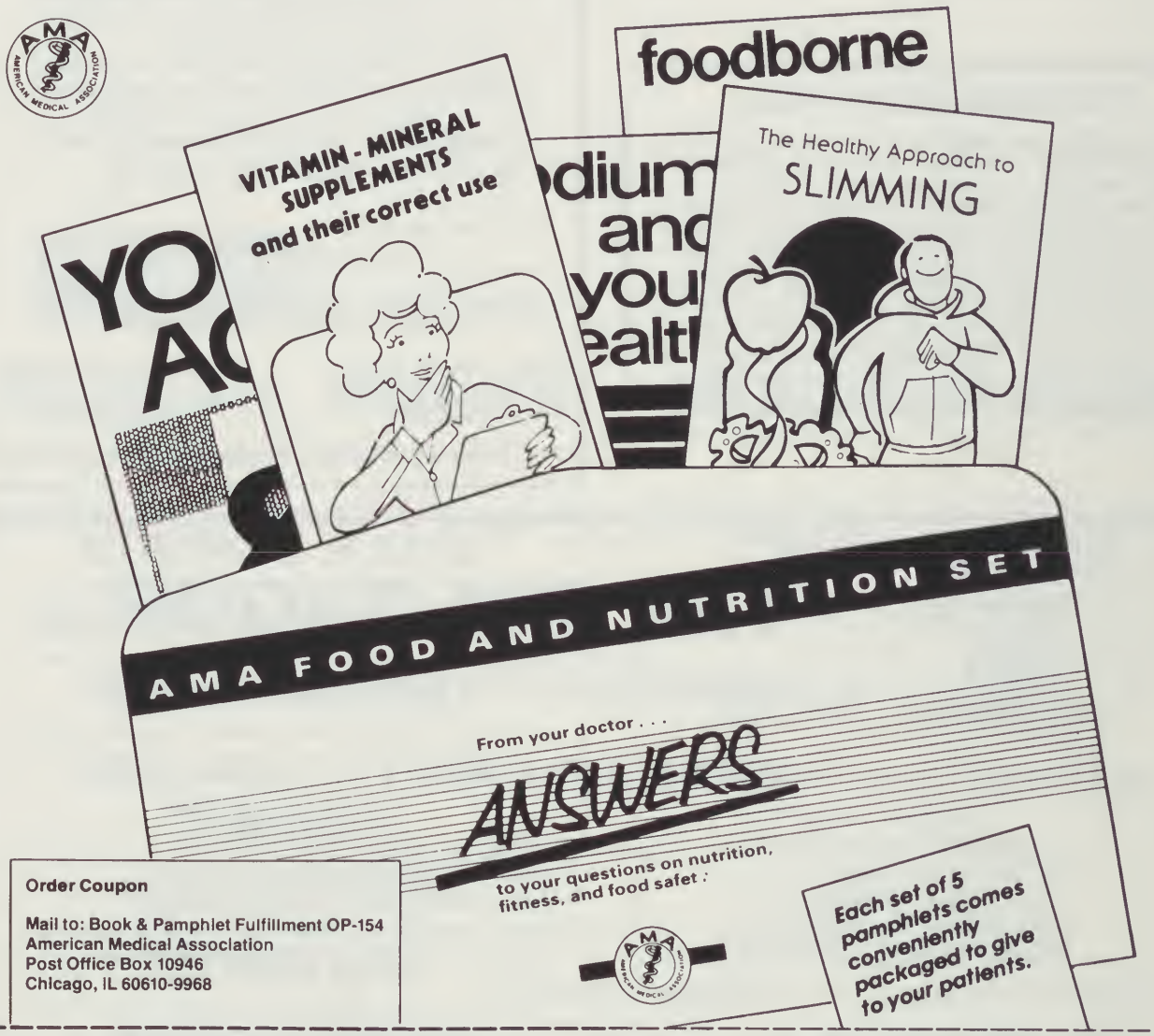
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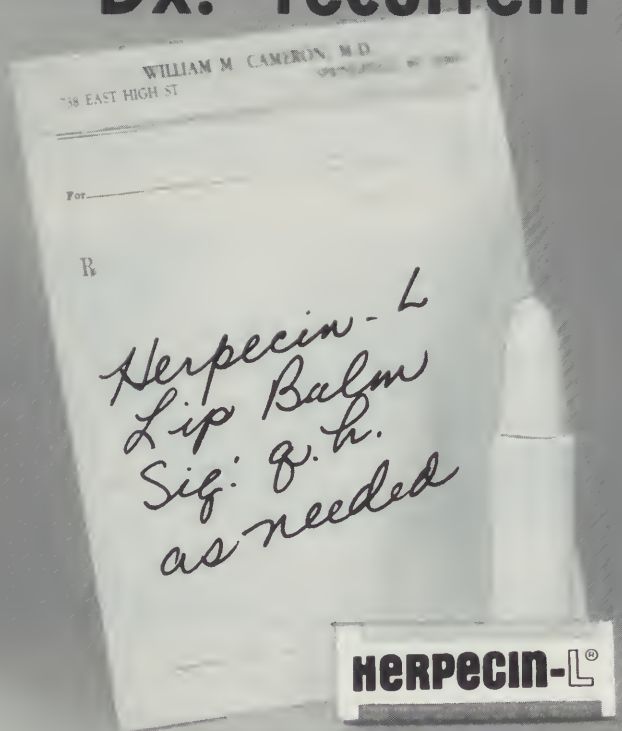
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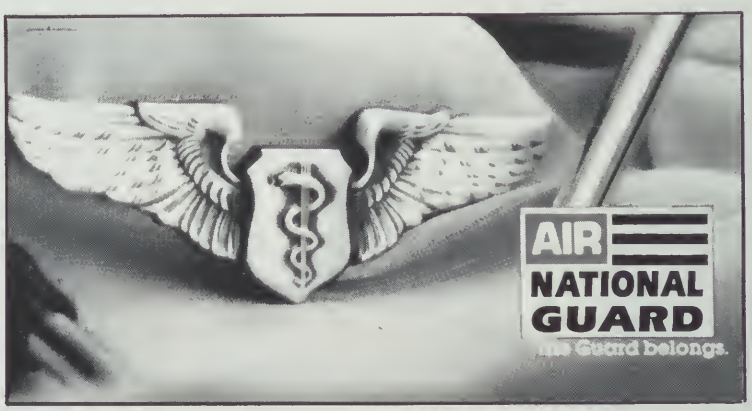
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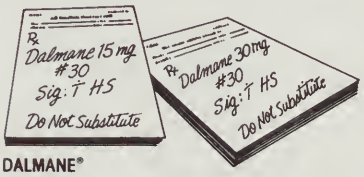
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PREVENTIVE MEDICINE ADMINISTRATION
MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

201 W. PRESTON STREET/BALTIMORE, MARYLAND 21201/(301) 383-2644

JUNE 1986

DEPARTMENT OF HEALTH AND MENTAL HYGIENE/JOHNS HOPKINS PHARMACOEPIDEMIOLOGY PILOT PROJECT TO PROMOTE ADVERSE DRUG REACTION (ADR) REPORTING

The pilot project to promote adverse drug reaction reporting was initiated in February when randomly chosen physicians practicing in Baltimore City, Baltimore, Prince George's, and Montgomery Counties, were sent questionnaires about the current FDA reporting system. We wish to thank the 1,271 physicians who responded to this questionnaire. They gave us important information which we have used in designing new methods for reporting. We will be contacting these same physicians and others at the end of the year to obtain information to help us evaluate our efforts.

Adverse drug reactions can be reported by telephone (301-955-5559). Information is taken by interviewer, transcribed to the official FDA 1639 form, and a copy sent to the reporting physician for verification and record. By mid-May, 10 reports have been received. The drug classes represented were lidocaine and its analogs, nonsteroidal anti-inflammatory agents, diuretics, antibiotics, vaccines, and intra-uterine devices. Four events resulted in new hospitalization, two in prolonged hospitalization, and the remaining four were treated on an out-patient basis.

These reports took an average 7 minutes to file. We encourage physicians who are busy to provide the information to their office nurse and/or secretary and delegate the reporting to them. We hope to make this reporting system efficient, simple, and accessible.

REPORTABLE COMMUNICABLE DISEASES IN MARYLAND IN 1985

This report describes the epidemiology of infectious diseases in Maryland as they were reported from local health departments, hospitals, clinics, private physicians' offices and on some occasions, laboratories. In about half of the diseases, additional information was obtained from the active surveillance system maintained by the public health nurses in the local health departments and nosocomial infection control practitioners.

AIDS (155)* - This year's total represents a 2.3 fold increase from the 67 cases in 1984. Of these, 47% had died by December 30, 1985. The total number of cases reported from January 1, 1979 through December 30, 1985 was 257, of which 157 (61%) had died. Of these 257 cases, 234 (91%) were male.

*The figure in brackets following the name of disease indicates the total reported cases with onset date in 1985.

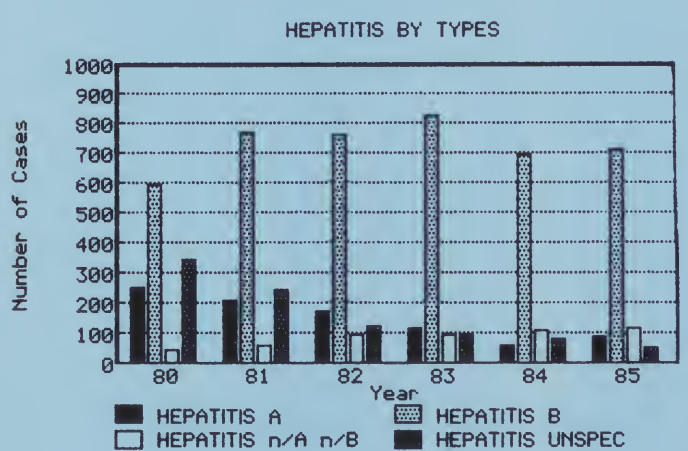
Homosexual men comprised the largest group and accounted for 47% of the cases; bisexual men, 17%; heterosexual intravenous (IV) drug users, 17%; homosexual or bisexual IV drug users, 3%; heterosexual contacts of persons with AIDS or at risk of developing AIDS, 2%; heterosexual transfusion recipients, 4%; and hemophiliacs, 1%. The remaining 24 cases (9%) were not included in any of the above groups--some of these died before they could be interviewed and others are still under investigation.

ENCEPHALITIS, VIRAL (32) - Herpes simplex virus caused or was suspected of causing at least 5 cases, 1 of which was fatal; in addition, 2 cases in newborn were confirmed by the herpes-specific IgM test. There were also 3 post-varicella-zoster cases and in another patient echovirus type 2 was isolated from the blood. No arboviral cases have been noted in the past few years.

GONORRHEA (31,258) - Antibiotic resistant strains of N. gonorrhoeae continue to be found: 108 cases of penicillinase-producing Neisseria gonorrhoeae (PPNG) were reported in 1985. A tetracycline resistant, penicillin-spectinomycin-sensitive strain of gonorrhea was identified in Prince George's county. The prevalence of this strain was 13.6% during a 3-week study period in October 1985. As a result, the Department of Health and Mental Hygiene (DHMH) has recommended tetracycline monotherapy not be used to treat uncomplicated gonorrhea and stressed the importance of test-of-cure cultures following treatment.

GUILLAIN-BARRÉ SYNDROME (29) - A 38% increase of reported cases was noted in 1985 as compared to the previous year; 13 (45%) cases occurred in January, February, and March. Fifty-five percent of the patients had experienced respiratory or gastrointestinal illness within 8 weeks prior to onset of neurological symptoms; one had had surgery during the same period and a 75 year old patient had been suffering from tuberculous meningitis.

HAEMOPHILUS INFLUENZAE DISEASE (133) - In addition to 100 meningitis, we were notified of 33 other systemic H. influenzae b infections (not reportable by law in Maryland). These included 13 epiglottitis, 5 cellulitis, 3 pneumonia, 2 septic arthritis and 10 bacteremia without evidence of local disease. Excluding 7 adult cases, the remaining 95% were 6 years old or less; 30% were in the 2-6 year age group, 4 (3%) were 18 - 23 months old. Most affected (44.4%) were 6 - 17 months old. Nine patients with meningitis died (7 males, 6 days to 2 years old and 2 females, 3 and 5 years old). Data from the surveillance system showed a disturbing trend of increase of H. influenzae resistance to ampicillin - ranging from 4.5% in 1975, 15% in 1981, and 34% in 1985.



HEPATITIS A (89) - There was a 33% increase in the reported cases compared to the previous year. The vast majority were confirmed by the HA IgM test. While 1/4 of all patients were in their twenties, only 2 were younger than 6 years of age. The male:female ratio was 0.9:1.

HEPATITIS B (709) - Even though the hepatitis B vaccine has been available since 1982, acute heptitis B has shown little tendency to deline. The trend since 1980 is depicted on the graph. The morbidity rate (16.3

per 100,000) was almost identical to the rate in 1984 (16.1 per 100,000). The male:female ratio was 1.5:1. More than 50% of the patients were in their twenties (age groups most affected were 25 to 29 for males and 20 to 24 for females). Non-whites comprised 43.2% of all the cases. Of 220 patients interviewed for drug usage, 54 (24.5%) admitted to having had self-administered illegal drugs by injection during the 6 months prior to the onset of hepatitis B. In 1981, 48 of 199 (24.1%) admitted to I.V. drug abuse.

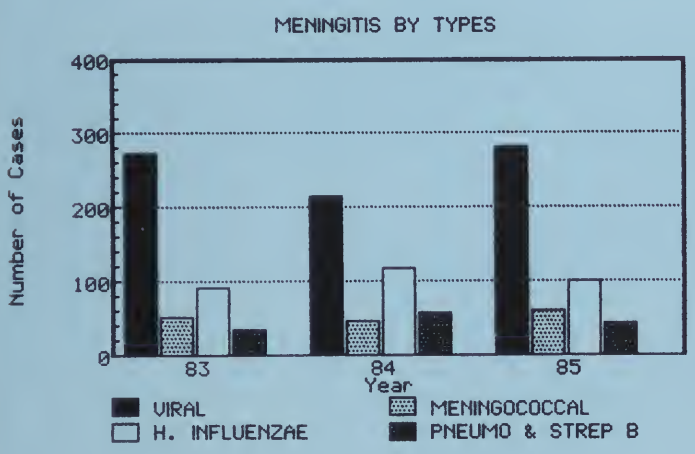
INFLUENZA AND INFLUENZA-LIKE ILLNESS (1143) - Sporadic cases were reported as early as October. Regional activity (i.e., outbreaks in counties whose population comprises less than 50% of the state population) was noted in the second part of January and the whole month of February. School absenteeism at that time peaked sharply; mainly, in Anne Arundel, Montgomery, and Baltimore counties. On the whole, the reports on influenza-like illness doubled, as compared with the "84/85" winter season. The State Virology Laboratory confirmed type B influenza epidemic, part of a nationwide outbreak. No type A influenza virus was isolated in Maryland.

LEGIONELLOSIS (13) - In almost all of the cases (mostly in their sixties), the diagnosis was made by DFA (direct immunofluorescent antibody) test. Two of the patients were probably exposed during a trip to Spain and Morroco; two reported "excavation or construction within eyesight of home". No nosocomial legionellosis was noted. The outcome for 2 cases was fatal.

MALARIA (29) - A slight decline occurred compared to the previous year. More than half of the cases were among foreigners visiting Maryland. The rest had visited, lived in or were originally from Africa (8), India (6) or South America (2). The origin of one isolated case could not be determined. P. vivax was identified in 30%, P. falciparum in 22%, P. ovale in 7.6% and P. malariae in 7.6% of the infected individuals. The species was not determined in 34% of the cases.

NOTE: A "case" of malaria is defined as an individual's first attack of malaria in the United States, regardless of previous attacks outside this country, and/or a positive peripheral blood smear.

MEASLES (115) - More cases were reported during this year than in any previous year since 1977. All but 11 of the cases occurred in Prince George's county where there was a large and protracted outbreak. Primarily involved were students from the University of Maryland and one high school; a number of community cases occurred also.



MENINGITIS, CRYPTOCOCCAL (11) - Seven of the cases were in their twenties and thirties (in some the infection occurred in association with AIDS). Four patients were between 64 and 86 years of age. Five of the cases had died at the time of report.

MENINGITIS, PNEUMOCOCCAL (28) - The illness occurred sporadically in the winter and autumn months. A 38% decline compared to the previous year was noted. White females were most often affected. More than 2/3 of all patients were 1 year old or younger, or older than 55. One death was noted and the outcome in 2 cases was unknown.

MENINGITIS, STREPTOCOCCAL (GROUP B) (17) - Only 3 of the patients were adults and 14 (82%) were 3 month old or less; seven of these (1-4 days old) probably acquired the infection from the mother's birth canal. One infant died, 11 survived and 2 were lost for follow-up.

MENINGITIS, VIRAL (281) - The illness had its peak in the summer and early fall. While enteroviruses of the coxsackie B and echoviruses groups were isolated from a few patients, in most the etiology was not determined. Coxsackie B_2, B_3, and B_4 were the microorganism isolated from some of the affected newborns (15 males and 8 females). Forty three percent of all cases were 5 years old or less; 57% were males. Most of the patients required hospitalization. No deaths were noted.

MENINGOCOCCAL INFECTIONS (61) - A 40% increase in incidence from 1.0 per 100,000 in 1982 (the lowest since 1978) to 1.4 per 100,000 in 1985, drew our attention to further increase the emphasis on surveillance of the contacts and prompt prophylactic intervention. Among the reported were 43 meningitis (one with pneumonia), 21 meningococcemia (3 with pneumonia and 1 with septic monoarthritis), 1 pneumonia and 1 pharyngitis. The male:female ratio was 1:13; the white:black ratio was 4.4:1. Forty-six percent (46%) were 5 years old or less, 23% were younger than 1 year, 2 were newborn. Thirteen cases (21%) were in their late teens and twenties; 2 were fatal. The overall case fatality rate was 9.8%. N. meningitidis group B was responsible for 14 and group C for 12 of the cases; group W135 was isolated from the patient with arthritis. In contrast, in 1984, group C was 1.8 times more prevalent than group B. No outbreaks in day care facilities have been noted.

PERTUSSIS (312) - The number of cases this year is the highest since 1957 when 374 were reported. The recent increase is attributed to a very aggressive case-finding, part of a two-year pertussis study within Baltimore city and county. Eighty percent (264) of all patients were from the study area. Thirty-seven percent of the confirmed cases in the project sites were less than 1 year old as compared with 73% in the rest of the state--this representing a significant difference in the age distribution. From July 1984 (when the study started) to December 1985, of the 413 clinically suspected cases 72 (17.4%) were laboratory confirmed, (35% by culture, 50% of direct fluorescent antibody and 15% by both tests). B. pertussis was isolated from 58 cases, B. parapertussis from 13; one person was confirmed as having both microorganisms. Three households showed B. pertussis and B. parapertussis either in different household members and/or the same individual.

RABIES, ANIMAL (760) - Maryland led the nation for the third consecutive year in the most cases of laboratory confirmed animal rabies. Although the total for the year was down to 760 from the high of 1,100 in 1984, rabies continues to be a significant threat to the health of Maryland residents. Fortunately, there have been no human deaths associated with this epizootic which began in 1981. Eighty-eight percent of the positive animals statewide continued to be raccoons. Spillover of rabies into other wild and domestic species is occurring, but not to a great degree. The domestic animal most frequently affected is the cat. In 1985, 11 rabid cats were identified; 15 in 1984; 8 in 1983, for a total of 34 during this epizootic. During the same period, only 2 dogs were rabid. The epizootic continues to move eastward. All of Maryland west of the Susquehanna river and the Chesapeake Bay is now involved. Counties behind the front are reporting rabies cases but at lower levels. It is anticipated that eventually the entire State will be involved in the epizootic of raccoon rabies.

(To be continued in the July 1986 Newsletter)

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HBP Commentary

Lowering Blood Cholesterol to Prevent Heart Disease: Recommendations of an Expert Panel

Elevated blood cholesterol is a major cause of coronary heart disease (CHD). An expert panel convened by the National Heart, Lung, and Blood Institute has made specific recommendations for diagnosis and management of hypercholesterolemia, as well as for public education about diet and its effect on CHD.

The National Heart, Lung, and Blood Institute and the NIH Office of Medical Applications of Research convened a Consensus Development Conference on Lowering Blood Cholesterol to Prevent Heart Disease in December 1984. After hearing a series of expert presentations and reviewing all the available data, a consensus panel of lipoprotein experts, cardiologists, primary care physicians, epidemiologists, biomedical scientists, biostatisticians, experts in preventive medicine, and lay representatives considered the evidence and made recommendations.[1]

Conclusions of the Panel

Elevated blood cholesterol level is a major cause of coronary heart disease (CHD).[2] It has been established beyond a reasonable doubt that lowering definitely elevated blood cholesterol levels (specifically blood levels of low-density lipoprotein cholesterol) will reduce the risk of heart attacks due to CHD. This has been demonstrated most conclusively in men with elevated blood cholesterol levels, but much evidence justifies the conclusion that similar protection will be afforded in women with elevated levels. After careful review of genetic, experimental, epidemiologic, and clinical trial evidence, the panel recommended specific treatment of individuals with blood cholesterol levels above the 75th percentile (upper 25 percent of values) and that all Americans over two years old should reduce saturated fat and cholesterol in their diet.

What is Hypercholesterolemia?

A precise definition of hypercholesterolemia (an abnormally high blood cholesterol level) is difficult to establish. Often, an abnormally high level of a biologic substance is considered to be that level above which are found the upper 5 percent of the population (the 95th percentile). However, the use of this criterion in defining "normal" values for blood cholesterol levels in the United States is unreasonable; CHD is our major cause of death, partially, because a large fraction of our population probably has too high a blood cholesterol level. It is staggering to realize that probably 50 percent of the adult population of the United States is hypercholesterolemic.

The consensus panel has defined two levels of hypercholesterolemia, both of which are associated with an increased coronary heart disease risk and both of which should be treated.

High-Risk Blood Cholesterol (severe hypercholesterolemia) This category is defined as values at approximately the 90th percentile or above as determined by the Lipid Research Clinics Prevalence Study. It will include individuals with hereditary forms of high blood cholesterol and will require the most aggressive treatment. Withholding treatment subjects these individuals to unnecessary risk.

Moderate-Risk Blood Cholesterol (moderate hypercholesterolemia) This category is defined as values approximately between the 75th to 90th percentiles and includes large numbers of people whose elevated blood cholesterol is due, in part, to their diet. The intensity of treatment is guided by the clinical and family history and the presence of other risk factors predisposing to coronary heart disease.

Specific Recommendations

- All physicians are encouraged to include whenever possible a blood cholesterol measurement on every adult patient when that patient is first seen. To ensure reliability of data, steps must be taken to improve and standardize methods for cholesterol measurement in clinical laboratories.

  The presence of high- and moderate-risk blood cholesterol should be confirmed by a repeat analysis. Although the initial sample may be obtained nonfasting, the repeat analysis should be obtained after an overnight fast so that a valid triglyceride level also can be determined.
- Individuals with high-risk blood cholesterol levels (values above the 90th percentile) should be treated intensively by dietary means under the guidance of a physician, dietitian, or other health professional; if

Table. Values for Selecting Adults at Moderate and High Risk Requiring Treatment

Age	Moderate Risk	High Risk
20–29	Greater than 200 mg/dl (5.17 mM)	Greater than 220 mg/dl (5.69 mM)
30–39	Greater than 220 mg/dl (5.69 mM)	Greater than 240 mg/dl (6.21 mM)
40 and over	Greater than 240 mg/dl (6.21 mM)	Greater than 260 mg/dl (6.72 mM)

HBP Commentary is contributed by the Maryland High Blood Pressure Commission, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

response to diet is inadequate, appropriate drugs should be added to the treatment regimen.

- Adults with moderate-risk blood cholesterol levels (values between the 75th and 90th percentiles) should be treated intensively by dietary means, especially if additional risk factors are present. Only a small proportion should require drug treatment.
- All Americans (except children under two years old) should be advised to adopt a diet that reduces total dietary fat intake from the current level of about 40 percent of total calories to 30 percent of total calories, reduces saturated fat intake to less than 10 per cent of total calories, increases polyunsaturated fat intake to no more than 10 percent of total calories, and reduces daily cholesterol intake to 250 to 300 mg or less.
- Intake of total calories should be reduced, if necessary, to correct obesity and adjusted to maintain ideal body weight. A program of regular moderate exercise will be helpful in this connection.
- In individuals with elevated blood cholesterol, special attention should be given to the management of other risk factors (hypertension, cigarette smoking, diabetes, and physical inactivity).
- The food industry should be encouraged to continue and to intensify efforts to develop and market foods that will make it easier for individuals to adhere to the recommended diets. School food services and restaurants should be encouraged to serve meals consistent with these dietary recommendations.

Food labeling should include the specific source or sources of fat, total fat, saturated and polyunsaturated fat, and cholesterol content as well as other nutritional information. The public should be educated on how to use this information to achieve dietary aims.

Screening Strategy for Finding Subjects with High Blood Cholesterol

According to data from the National Center for Health Statistics, a high percentage of the American population sees a physician at least once every year. If a cholesterol level were determined on adults at these visits, many of the individuals with cholesterol levels above the 75th percentile would be identified in a relatively short time and could be evaluated and treated as described above. This physician- and clinic-oriented method for screening would be cost-effective. Because some patients may not see a physician for several years, it would be advisable to educate the public to the importance of knowing one's cholesterol level, just as has been done with high blood pressure. Educational programs developed by voluntary and public health organizations in conjunction with the National Cholesterol Education Program (NCEP)[3] of the National Heart, Lung, and Blood Institute, as recommended by this consensus panel, should alert all adults to the advisability of learning their cholesterol level.

For children, only a "family history screening" is recommended; that is, cholesterol levels should be obtained in those at higher risk because of a strong family history. There is some controversy about dietary recommendations for children, and recommendations will be further refined by the Coordinating Committee of the NCEP.

Reducing the Blood Cholesterol of the General Population

The blood cholesterol level of most Americans is undesirably high, in large part because of our high dietary intake of calories, saturated fat, and cholesterol. In countries with diets lower in these constituents, blood cholesterol levels are lower and coronary heart disease is less common. The Japanese population, in comparison with the U.S. population, is characterized by a much lower average cholesterol level and a much lower frequency of coronary heart disease. The Finnish, on the other hand, have a much higher average cholesterol level and a much greater risk of coronary heart disease than do U.S. citizens. Furthermore, Japanese who have migrated to Hawaii and to San Francisco have higher cholesterol levels and a higher risk of coronary heart disease than nonmigrants. Compilation of all the available data suggests that it will be beneficial to lower the blood cholesterol of the average American.

In the general population, the basic intervention should be based on diet rather than drugs. A shift from the current typical American diet to one that is lower in total fat, saturated fat, and cholesterol is recommended.

Other elements important to the prevention of cardiovascular disease, including *control of high blood pressure*, avoidance of cigarettes, and maintenance of reasonable levels of physical activity, are recommended.

References

1. Lowering Blood Cholesterol to Prevent Heart Disease—Consensus Conference Statement. *JAMA* 253(1985):2080–86.

2. Sherwin, R.; Russell, R.P.; Lewis, C. "Role of Blood Cholesterol in Atherosclerosis and Coronary Heart Disease." *MMJ* 35(1986):248–50.

3. Cleeman, J.I. "The New National Cholesterol Education Program." *MMJ* 35(1986):339–41.

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Today's Psychiatry

Helping the Elderly Get Psychiatric Care

GARY W. NYMAN MD, PAUL RUSKIN MD, and TOM KRAJEWSKI MD

Mr. B. is a 74-year-old man who has become preoccupied with his diet, his bowel habits, and his sleeplessness in the past two years. After his wife died three years ago, most of his social activities dwindled. He makes no connection between his physical complaints and the losses of his wife and his social network. A thorough history, physical examination, and laboratory tests revealed no diagnosable physical illness. The patient's physician started him on an antianxiety agent and then on an antidepressant. Each were helpful only transiently. What more can a physician do for this increasingly impaired and difficult-to-manage patient?

Assuming the absence of physical illness and the patient's unresponsiveness to therapeutic levels of psychoactive medication, the physician is faced with the need to modify aspects of the treatment approach. Humanitarian rather than "high tech" intervention may be critical to turning around the patient's deteriorating existence. The elderly patient often requires explicit direction and support. Psychiatrists treating elderly patients find it useful to obtain direct input from the patient's family, neighbors, and friends. Prior involvement with civic groups, church activities, or friends and relatives living nearby may be revealed and frequently can be rekindled. At times, a home visit may disclose aspects of the living situation previously untold and also may encourage enough trust to allow treatment to begin.

Mr. B.'s treating physician reached the point where treatment and time demands warranted psychiatric consultation. The psychiatrist (P.R.), working jointly with the treating physician, suggested a change in antidepressants and indicated the importance of a home visit. The psychiatrist made one from which some useful information emerged about the patient's ties to a church. The minister was pleased to help pull Mr. B. back into thrice-weekly activities and called the physician bimonthly to let him know how Mr. B. was doing. The psychiatrist met with the patient for six sessions in short-term psychotherapy to help him resolve some of the grief secondary to his wife's death. Mr. B. started to sleep better and seemed less preoccupied with his physical complaints. He became reinvolved in his former activities, and his depression remitted.

Psychiatrists are becoming more involved in treating disorders of the elderly. Careful and thorough evaluations are necessary to rule out physical illnesses with atypical presentations or complex drug interactions and side effects. Brief interventions are often indicated, and a multifaceted approach combining psychotropic medication, psychotherapy, and direct social intervention is often the treatment of choice. Appropriate psychiatric treatment can make a dramatic difference in the well-being of an elderly patient with emotional problems.

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

One Minute with Diabetes

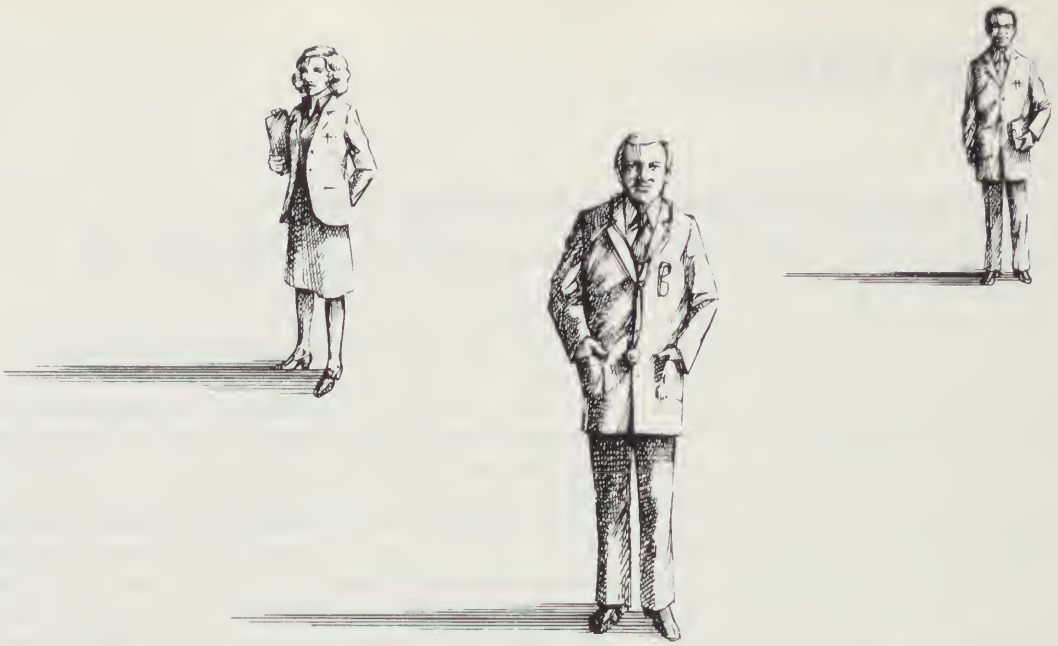
Doctor, I am confused about my meal plan because I have two medical problems, diabetes and chronic kidney disease, each having a different dietary program. What adjustments should I make?

The ideal composition of the meal plan for diabetic patients with uremia is still debated. Such a plan should aim at reducing blood glucose concentrations and the atherogenic lipoproteins without deleterious effects on the blood urea levels and kidney function. The widely used very low protein diets for the treatment of nondiabetics with uremia is inappropriate because it has to be high in carbohydrate and/or dietary fat, thus aggravating blood glucose control and increasing the athrogenicity of plasma lipoproteins.

For diabetic patients having renal complications, high fiber diets have been used successfully with significant clinical benefits on both blood glucose and plasma lipoprotein metabolism. The intake of a high fiber diet lowers serum creatinine levels, probably due to reduction of muscle protein catabolism, which is secondary to improved blood glucose control.

It is not uncommon to find diabetic patients with renal complications being managed by a nephrologist in a dialysis center and an internist or diabetologist; the patients have two meal plans and do not understand how to make the necessary adjustments. The usual result is that the patient ignores both meal plans. It would be helpful if physicians improved the channels of communication and consulted a qualified nutritionist in order that both medical problems might be improved.

DeWITT E. DeLAWTER MD
Editor



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Executive Director's Newsletter

June 1986

PHYSICIANS FEES

Publication of physicians' fees by the Maryland Attorney-General has received nationwide attention, although the long-awaited booklet is not off the press at this writing. The Faculty has assisted in the project by contributing to the booklet, "Health Care Shopper's Guide - 67 Ways to Save Money." We have emphasized that quality of medical care and cost are unrelated.

Billing data was obtained by the AG under the freedom of information law and represents 1983 Medicare Billings by Maryland physicians. Although the 1984 Medicare freeze is mentioned, the booklet DOES NOT clarify for consumers the wide variation in charges they will likely encounter.

PHYSICIANS DISPENSING

SB 830 - Physician dispensing. The effective date of this bill is January 1, 1987. Many have asked about the implementation. The Board of Medical Examiners will develop rules and regulations, which will be detailed to you as soon as they are available.

NEW DEA REQUIREMENT

In October 1985, the Drug Enforcement Administration published a final rule amending recordkeeping requirements for physicians who prescribe, administer, and dispense controlled substances. This rule implements the changes enacted by Congress in 1984 in the Diversion Control Amendments. Records are required to be kept for the administration of controlled substances by individual practitioners who regularly administer or dispense controlled substances and charge their patients for these substances.

The rule reflects Congressional intent to strengthen the authority of the DEA in preventing the diversion of controlled substances and to tighten the "closed" system of distribution for controlled substances to extend to the practitioner level.

INSURANCE TERMINATED

Effective May 15, 1986, the Maryland Insurance Division terminated the approval of The Mutual Fire, Marine and Inland Insurance Company as a Surplus Lines insurer, as it no longer meets the Maryland Surplus Lines requirements.

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	Robert Kan, M.D.	301-321-7011
JULY	Jeffrey Shane, Esq.	301-565-4400
	Vincent O'Donnell, M.D.	301-530-1830

OVERSIGHT

In the April issue of the Assemblyman, those who assisted in the passage of the malpractice reform legislation were recognized. One significant group was omitted by mistake: the Medical Mutual Liability Insurance Society, whose staff and officers were present constantly in Annapolis, who participated in the Governor's Task Force and worked diligently for the passage of the legislation. Our sincerest thanks go to Doctors Raymond Yow, Gerald Carroll, J. Roy Guyther, John Lodmell, and Frederick Miltenberger, along with John Spinella and Ronald Gass.

SEMIANNUAL MEETING RESOLUTIONS

Resolutions to be considered by the House of Delegates at its Semiannual Session on Saturday, September 27, 1986 must be received in the Faculty office by FRIDAY, AUGUST 1, 1986.

Resolutions must be sponsored by a member or component society of the Faculty, the Council, or committees of the Faculty. A resolution introduced by an individual member must have the endorsement of either one-third of the membership of his component society or 30 members of his component society whichever is smaller.

FAREWELL CONNIE

Constance Townsend, Assistant to the Executive Director, is retiring after nearly 22 years of service to the Faculty. She will be honored at the Council meeting on June 26th.

Acting Executive Director

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Pediatric Morning Report

Nucleated Red Blood Cells in Children

A five-year-old female was admitted with chest pain of relatively acute onset and fever. The admission complete blood count revealed the presence of mild anemia (Hemoglobin 10.6 gm/dl), a leukocyte count of 18,000/ μl, and the presence of 2 nucleated red blood cells/100 white blood cells. The immediate concern (on learning about the presence of the nucleated red blood cells) was whether this child had a malignancy with bone marrow involvement.

Normoblastemia in adults is usually associated with malignancies or other serious conditions. This is apparently not the case in children. A study of 100 patients, 3 months to 18 years of age, with nucleated red blood cells in their peripheral blood smear revealed that the most common cause for normoblastemia was a disorder associated with hypoxia. A total of 49 percent of the patients fell into the hypoxia category while only 8 percent of the children had a malignancy. The diagnoses of these 100 children with normoblastemia is listed in Table 1.

Our 5-year-old patient turned out to have a severe pneumonia, a unilateral pleural effusion, and an initial oxygen saturation of only 78 percent. When the pneumonia improved along with the oxygen saturation, the nucleated red blood cells disappeared from the peripheral blood smear. (Sills, R.H. and Hadley, R.A.R. "The Significance of Nucleated Red Blood Cells in the Peripheral Blood of Children." *Am J Pediatr Hematol Oncol* 5 (1983): 173.)

Table 1. Diagnoses of 100 Children with Normoblastemia

1. Cardiac disorders	24
2. Hematologic disorders	22
Hemolytic anemias = 9	
Red cell production = 8	
Acute blood loss = 1	
Minimal or no anemia = 4*	
3. Pulmonary disorders	14
4. Gastrointestinal disorders	9
5. Neurologic disorders	8
6. Collagen vascular disorders	3
7. Complex or micellaneous	11
Associated with a recognized cause of normoblastemia = 7	
No recognized etiology for normoblastemia = 4*	
8. Bone marrow replacement	9
Easily diagnoses on basis of clinical history, blood counts and peripheral smear = 5	
Diagnosis first suggested by unexplained normoblastemia = 4*	

* Patients who did not have readily identifiable disorders known to be associated with normoblastemia.

From the Department of Pediatrics, Frank A. Oski MD, Chairman; Robert Wood MD, Chief Resident in Pediatrics, Children's Medical and Surgical Center; and Linda Clark, Librarian, Department of Pediatrics, The Johns Hopkins School of Medicine.

Normal White Cell Count in the Black Infant

Reviewing the white blood count in a ten-month-old black infant who had been admitted for hernia repair, it was noted that the absolute neutrophil count was only 700 μL. Ordinarily an absolute white cell count of less than 1,000 μL is regarded as neutropenia, and in many centers this finding would trigger an evaluation. Is the normal white cell count and differential different between black and white infants? The answer is "yes." A study of 50 healthy black and 50 healthy white infants, nine to twelve months of age illustrates this point in Table 2 and demonstrates that 20 percent of the black infants have absolute neutrophil counts of less than 1000 μL.

Previous studies have demonstrated that the total leukocyte count is lower in black adults and in black children one to five years of age than the total leukocyte count in white adults and white children one to five years of age. It does not appear from currently available information that this normally lower white cell count is associated with an increased proclivity to infection. (Sadowitz, P.D. and Oski, F.A. "Differences in Polymorphonuclear Cell Counts between Healthy White and Black Infants." *Pediatrics* 72 (1983): 405.)

Table 2. WBC Count in Black and White Infants

	Black Infants (N = 50)	White Infants (N = 50)	P Value
Total leukocyte counts (uL)			
Mean ± 1 SD	9,024 ± 2,043	11,626 ± 3,576	.01
Range	4,100–14,300	5,400–24,200	
Absolute neutrophil count (uL)			
Mean	2,373 ± 1,488	3,350 ± 1,944	.01
Range	121–6,732	1,062–10,890	
Absolute lumphocyte count (uL)			
Mean	5,911 ± 2,212	7,200 ± 2,061	.01
Range	900–11,400	2,178–11,718	
Absolute neutrophil count 1,000/uL	10	0	.01

• • •

Unilateral Proptosis

A three-year-old white male was admitted for evaluation of unilateral proptosis of 4-weeks' duration. There had been no preceding trauma, infection, or history of allergy. Physical examination confirmed the presence of moderate proptosis of the right eye with fullness of the right maxillary sinus. Extraocular movements were intact, and there were no signs of inflammation. The presence of progressive proptosis in childhood often suggests a neoplasm, and if the proptosis is associated with eccymoses the natural conclusion is that the child has a neuroblastoma. The other causes of proptosis include: inflammatory lesions, scurvy, infantile cortical

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hyperostosis, thyrotoxicosis, tuberculosis, syphilis, sarcoid, lymphoma periarteritis nodosa, Wegener's granulomatosis, reticuloendotheliosis, congenital anomalies of the skull and facial bones, and cholesteatoma.

One unusual case of proptosis, not included on most lists, is cystic fibrosis. Our patient had a mass that filled the right ethmoid sinus. The mass proved to be a pyocele containing Staphylococcus aureus. Sweat test confirmed the diagnosis of cystic fibrosis. At least 5 instances of proptosis due to cystic fibrosis have been described. Clinical and roentgenographic abnormalities of the paranasal sinuses are found in over 90 percent of children with cystic fibrosis after two years of age. Ductular dilatation and obstruction with inspissated secretions may involve the mucosal glands in the sinuses and produce these problems. (Strauss, R.G.; West, P.J.; and Silverman, F.N. "Unilateral Proptosis in Cystic Fibrosis." *Pediatrics* 43 (1969): 297.)

FRANK A. OSKI MD, Chairman
ROBERT WOOD MD, Chief Resident in Pediatrics
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Maryland Oncology Newsletter

Maryland State Breast Cancer Pamphlet

After two years of discussion and input from a variety of medical and lay sources, a pamphlet was published entitled *WHAT YOU'RE ABOUT TO READ ON BREAST CANCER CAN SAVE A LIFE ... YOURS!* In August 1985 this pamphlet became available (at no charge) to all health-care professionals. A statewide publicity campaign was begun to announce this pamphlet in an attempt to avoid legislation that would compel free distribution to each patient. It was presumed that physicians would distribute this pamphlet to every woman suspected of or diagnosed to have breast cancer.

Apparently this excellent brochure has not been distributed as hoped, either from lack of knowledge or unwillingness on the part of the physicians. Complaints from several women's interest groups that patients are not being informed of treatment options for breast cancer have reached the legislators in Annapolis.

Certainly it is preferable for the medical profession to willingly distribute this pamphlet to patients recently diagnosed or suspected of having breast cancer rather than being obligated by law to do so. Therefore, I urge every physician throughout the state to request these pamphlets from the Medical and Chirurgical Faculty and pass them on to their patients.

The information contained in the brochure is in plain language, easy to understand, and it will most assuredly benefit patients and help them make informed decisions. The pamphlet explains the importance of screening by breast self-examination and mammography in early detection of breast cancer. It goes on to explain the role of *biopsy* of a breast mass to obtain histological diagnosis and hormone receptors if malignancy is detected. The pamphlet then presents two approaches if a breast mass is detected: *two-step procedure*, where a biopsy is performed on an outpatient basis, and a day or two later, if the diagnosis of cancer is made, the definitive treatment is discussed; or a *one-step procedure* when a biopsy, followed by immediate frozen section, and definitive treatment are performed in one setting.

The brochure then explains each therapeutic approach as well as the advantages (benefits) and disadvantages (risks) involved. These approaches include surgery, radiation therapy, chemotherapy, and hormonal therapy. The surgical approaches are thoroughly presented including:

Radical Halsted mastectomy removal of the breast, the underlying pectoral muscles, and axillary contents. It is performed rarely now and only in cases where the breast tumor extends beyond the breast to the pectoralis major muscle or its fascia.

Modified radical mastectomy the breast and the pectoralis major fascia are removed with the axillary contents. The pectoralis major muscle is retained. It is performed in cases with large breast cancers but confined to the breast, centrally located breast cancers, or multicentric cancers (such as lobular carinoma).

Simple mastectomy removal of the whole breast and the pectoral fascia only. The risk of leaving the axillary lymph nodes that may harbor cancer is presented.

Segmental or partial mastectomy also known as *lumpectomy* or *tylectomy* removal of the segment of the breast containing cancer (with tumor-free margins) that must be accompanied by axillary dissection is discussed. The role of radiation therapy as the primary therapeutic approach, and in addition to lumpectomy is presented.

Chemotherapy and *hormonal therapy* do not replace surgery or radiation therapy as primary treatment for breast cancer but are used in addition to surgery or irradiation as an adjuvant in patients with metastasis.

Investigational treatments in breast cancer also are explained. Finally, the pamphlet explains the use of *external prosthesis* and the role of *reconstructive surgery* after mastectomy and the value of *follow-up* of these patients and ends with a Glossary of medical terminology in plain language for patients.

I believe this brochure is extremely helpful, first to the patient who is facing two major problems: the possible perceived loss of her femininity and the threat to her life by cancer. Second, it is very helpful to the physician to explain to a knowledgeable patient why one procedure is preferred over another in her case. The successful management of breast cancer requires a sense of trust and mutual understanding between the patient and her physician and surgeon. Together they can plan the most effective course of action. The patient's consent is required before any definitive treatment is performed. It is the patient's right to participate fully in making treatment choices.

All family physicians, obstetricians and gynecologists, internists, and especially surgeons should read this breast cancer pamphlet. The surgeon should not operate on a breast cancer patient who is not completely informed of her options of therapy. Please call or write to the Medical Chirurgical Faculty of Maryland and request as many free copies of the pamphlet as you need for your practice and give a copy to any patient with a breast mass.

Tumor Conferences are held weekly on Fridays between 8–9 a.m. in Room N13E28 at the University of Maryland Hospital. This is an open meeting; physicians are welcome to attend and to present cases, but please call 528-5224 before Friday to obtain scheduled time for your case(s) and bring the pathological slides with you.

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

E. GEORGE ELIAS **MD**
University of Maryland, Surgical Oncology Program

Executive Committee and Council Actions

Executive Committee—March 20, 1986

• **Public Relations Long-Range Plan** The Committee reviewed and approved the public relations plan for 1986–87, which included a budget of $6,000 for the media awards project.

The Committee also reviewed a cost estimate for completion of the public image campaign (begun with Image Dynamics) that was discontinued in favor of the malpractice campaign. Cost for completing the campaign could amount to more than $250,000. The Committee voted to ask the Public Relations Committee to return with a revised budget for a smaller and more manageable campaign that would include no monetary expenditures until 1987 and would include competitive bids from a variety of public relations agencies.

• **Montgomery County Malpractice Campaign** A request from Montgomery County Medical Society for reimbursement of funds expended in the malpractice campaign was deferred pending further information. The Committee directed staff to request cost estimates from all component medical societies. If funds remain from the voluntary assessment, these monies will be distributed among all components that have submitted estimates. To date, approximately $91,000 has been collected with $81,000 paid out.

• **AMA Public Opinion Survey** The Executive Committee decided not to participate in the 1986 research survey and suggested intervals of at least three years for participation in such surveys.

• **Board of Examiners, Nursing Home Administrators** Blaine Fitzgerald MD (currently serving) and Joseph Zebley MD were nominated to fill a vacancy on this Board. Both will be contacted and their names submitted if they approve.

• **Center for Health Education** George Z. Malouf MD, on behalf of the Center for Health Education, requested $12,000 in support of the coming year. This represents a decrease in the request from the amount given by the Faculty in 1985. The request was approved and will be proposed to Council for final action.

Council—March 20, 1986

• **Minutes** The minutes of the Council meeting of January 30, 1986 were adopted.

• **Public Relations** Council approved the 1986–87 plan including the proposed budget.

• **Emeritus Membership** The following members were approved for Emeritus membership, each on the recommendation of the component society indicated (all retired):

Anne Arundel County:	Manning W. Alden MD, Annapolis
Baltimore City:	Charles C. MacMinn MD, Baltimore
	Carlos G. Miller MD, Timonium
	Lydia L. Pauli MD, Baltimore
	Calbert T. Seebert, MD, Baltimore
	John O. Sharrett MD, Phoenix
	Albert J. Weiss MD, Baltimore
	Thomas L. Worsley MD, Baltimore
Baltimore County:	Raymond M. Cunningham MD, Baltimore
	William P. Englehart MD, Phoenix
	Robert B. McFadden MD, Baltimore
	John C. Mitchell MD, Baltimore
	Richard E. Hoover MD, Baltimore
	John S. O'Connor MD, Baltimore
	Alfred S. Garrison MD, Baltimore
Howard County:	Anthony J. Young MD, Ellicott City
Montgomery County:	William G. Hall MD, Potomac
	Manuel P. Landman MD, Bethesda
	Robert E. McCollough MD, Chevy Chase
	Eugene A. Rosenberger MD, Silver Spg.
Prince George's County:	William B. Hagan MD, Hyattsville

• **Dues Waivers** Dues waivers for 1986 were granted by Council for the following members:

Baltimore City Medical Society:	Patricia A. McIntyre, MD, Baltimore (medical disability)
Baltimore County Medical Assn:	Vernon C. Kelly MD, Baltimore (semiretired)
	William A. Rinn MD, Baltimore (semiretired)
	Ellis Turk MD, Baltimore (financial hardship)

• **Medicolegal Committee** Israel H. Weiner MD reported for the Medicolegal Committee on the "Guidelines to Physicians on Court Subpoenas and Testimony." Council adopted the guidelines and requested they be published in the *Maryland Medical Journal.*

• **Nominees for AMA Awards** Council directed that the names submitted last year be resubmitted except for the Benjamin Rush Award, that the name of Margaret Zassenhous be submitted for that award, and that the component medical societies be asked to submit names for the AMA-ERF Award for Health Education. These nominations are due to the AMA by September 12. After the discussion, the item was tabled to the Council meeting after the Annual Meeting.

• **Legislative Update** Donald T. Lewers MD gave a legislative update and discussed the status of malpractice legislation, physician verification of death prior to mortician transfer, certificate of need requirements for health care facilities, people's advocate for health, and physician assistant legislation.

• **Suicide Prevention Program for Physicians** A resolution from the Baltimore City Medical Society requesting AMA to explore the feasibility of developing a suicide prevention program for physicians was approved and will be given to the AMA delegation for introduction at the AMA Annual Meeting in June.

• **Advisory Board on Hospital Licensing** The current representative, Thomas M. Holcomb MD, will be contacted to see if he wishes to continue to serve. Any additional nominees will be submitted to the Executive Committee for approval.

• **Auxiliary Report** Mrs. Kathleen S. Karpers, president of the Auxiliary, presented a report of the statewide activities of Auxiliary members. Mrs. Mary Strauss has been nominated as secretary of the Auxiliary to the AMA. The Auxiliary received a Doctor's Day Proclamation from Governor Hughes.

• **Professional Ethics Committee** Louis C. Breschi MD presented the ethical statements on behalf of the Ethics Committee. The first, "Termination of Physician/Patient Relationships," was approved by Council. After discussion, the second statement, "Free Choice of Physician and Patient," was referred back to the Ethics Committee for revision. At issue was the question of who has the right to abrogate a relationship by contract.

• **Center for Health Education** George S. Malouf MD presented a request for approval of Executive Committee action to provide $12,000 in funding for the Center for Health Education in 1986. The request was approved unanimously.

• **Leadership Retreat** Council received the product of the planning retreat held February 7–9, 1986. Leon E. Kassel MD explained the format of the material as being the thought processes of the group, the issues of most concern, and the timetable for action. Some items have been deferred for more information. The report and audit of the library and historical collection will be presented at the Executive Committee on April 10. After discussion, it was moved and seconded to receive the report, to authorize the pursuit of activities as noted, and to return to Council for further discussion and action as needed.



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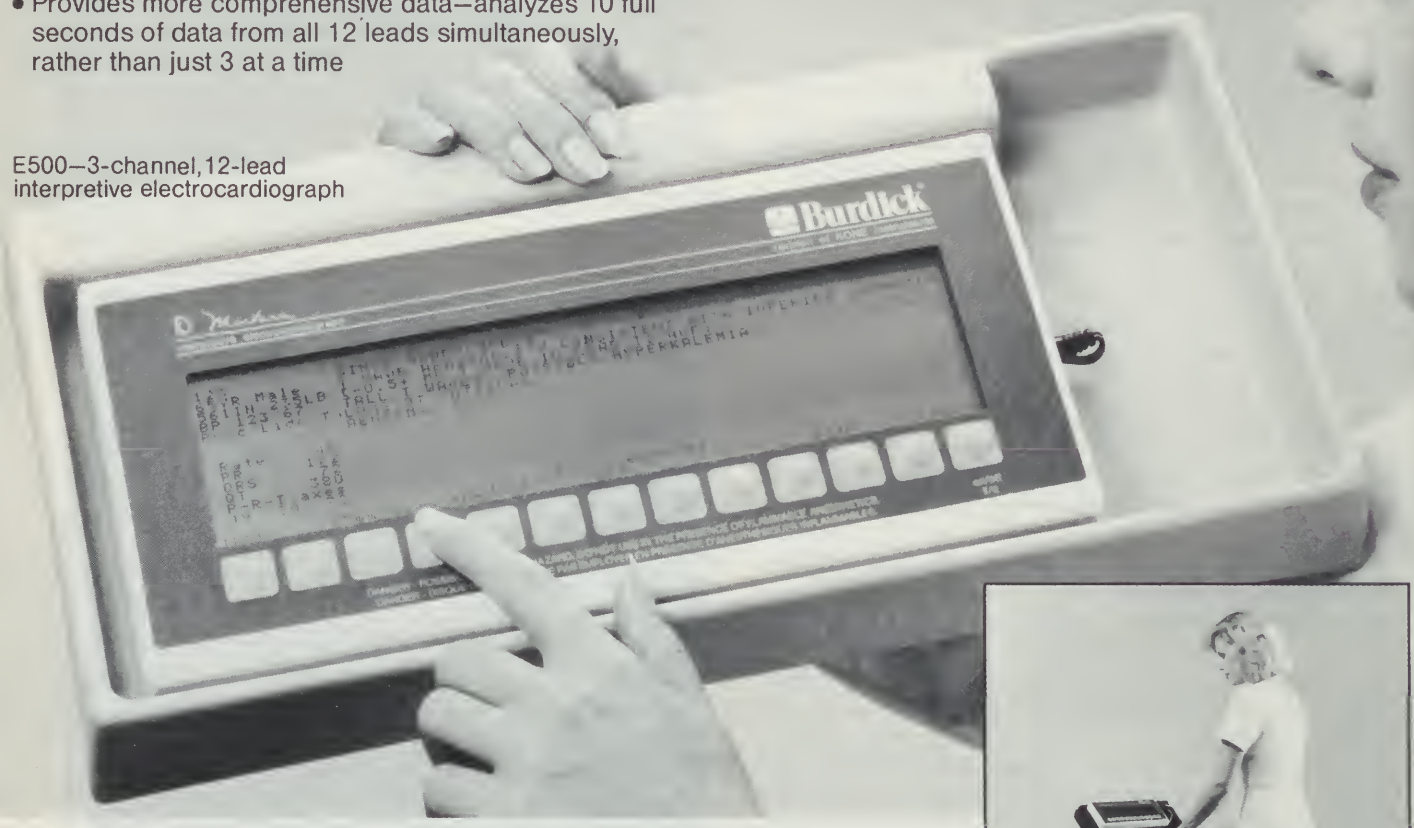
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Maryland Study: Public Opinion on Medical Malpractice

Results of a statewide survey conducted by the University of Baltimore Survey Research Center show that over 63 percent of the people surveyed think there should be a limit on the amount of money that can be awarded to someone suing a doctor for malpractice. Over 83 percent of those surveyed think there should be a limit on the amount of money that an attorney can receive from a malpractice suit. More than 53 percent of the people surveyed said they were "very concerned" that the costs of medical malpractice insurance might cause doctors to stop offering certain kinds of medical services.

The statewide telephone survey was conducted to find out what people thought about certain public policy issues. Interviews were conducted on December 2 to 5 and December 9 and 10, 1985. All household telephone numbers were selected by random digit dialing. Interviews were held with the individual in each household who had the next birthday, and all respondents were at least 18 years old.

The survey included four questions about medical malpractice:

QUESTION I: As you no doubt know, there have been a number of cases recently where people have sued doctors for malpractice. Do you think there should be a limit on the amount of money that can be awarded to someone suing a doctor for malpractice?

	Percent
Yes	63.7
No	24.4
Don't know	6.1
No opinion	4.0
Refusal	1.9

N = 377
Sampling error = ±4.9 percent

QUESTION II: Do you think there should be a limit on the amount of money that an attorney can receive from a malpractice suit?

	Percent
Yes	83.8
No	9.8
Don't know	3.2
No opinion	1.9
Refusal	1.3

N = 377
Sampling error = ±3.7 percent

QUESTION III: How concerned are you that the costs of medical malpractice insurance might cause doctors to stop offering certain kinds of medical services? Are you very concerned, somewhat concerned, or a little concerned?

	Percent
Very concerned	53.8
Somewhat concerned	26.8
A little concerned	14.3
Refusal	1.9

N = 370
Sampling error = ±5.1 percent

QUESTION IV: Do you think that the state should help doctors pay for their medical malpractice insurance?

	Percent
Yes	24.9
No	65.1
Don't know	5.4
No opinion	2.7
Refusal	1.9

N = 370
Sampling error = ±4.9 percent

• • •

Washington State Adopts Tort Reform

The Washington state legislature has approved a program of tort reform over the objections of the Washington State Trial Lawyers Association. The bill requires plaintiffs to bring medical malpractice suits within three years of the alleged injury or within one year of discovery, but in no case may suits be brought more than eight years after injury. In addition, the bill imposes an adjustable cap on awards for noneconomic damages. The cap, ranging between $117,000 and $573,000, would be adjusted according to age, with older victims receiving lower amounts.

• • •

Collateral Source Rule Eliminated in Indiana

A bill adopted by the Indiana Legislature will require that juries be told about compensation collected from collateral sources by plaintiffs in personal injury cases. In most instances, juries will be instructed to reduce economic awards by the amount of reimbursement available from other sources. Until now, state courts have barred introduction of evidence that a plaintiff has been compensated by any source other than the defendant's insurance company. The bill was opposed by trial lawyer groups in the state.

Alzheimer Disease. Meridian Healthcare is helping to do something about it.

As the largest provider of long-term nursing care in Maryland, Meridian Healthcare is in a unique position to exercise some leadership in developing new techniques for caring for Alzheimer victims. Even more important, we have made a commitment to actively assist with the search for a cure for this serious, terminal condition.

A specialty Alzheimer Disease Care Unit has been created at Meridian Nursing Center—Heritage in consultation with The Johns Hopkins University Medical Institutions to develop innovative approaches to care. To advance this research, Meridian funds an Alzheimer Disease Research Fellowship in The Johns Hopkins University Department of Psychiatry.

Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

Our concern with Alzheimer Disease is only one of many ways Meridian Healthcare is different. For more detailed information on our Alzheimer program or on any of our 13 Nursing Centers in Maryland, call or send the coupon for our free *Referrer's Guide*.

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Nancy Heinritz Howell

New President Nancy H. Howell, 1986–1987, sees the need for streamlining the Auxiliary to meet the needs of the changing medical community. Nancy has been very active in the Auxiliary for a number of years on both county and state levels. She was a co-founder and past-president for three years of the Charles County Medical Society Auxiliary; has served as president-elect, secretary, and state membership chairman of the Auxiliary to Med-Chi as well as Auxiliary representative to the Med-Chi Publicity and Public Relations Committee; and has been Maryland Councilor to the Southern Medical Association Auxiliary. Nancy is innovative and a dedicated worker.

Born in Baltimore City and raised in Baltimore County, Nancy majored in Spanish and secondary education at Frostburg and Towson State colleges. Her first position was as a Spanish teacher at the Hereford Junior-Senior High School in Baltimore County. She later worked as an ICU technician at Sacred Heart Hospital in Cumberland and as a secretary at South Baltimore General Hospital where Nancy met her husband, Daniel M. Howell MD, a resident in Internal Medicine. Dr. Howell is a graduate of the University of Maryland undergraduate and medical schools. In 1972 the Howells moved to Charles County where Dr. Howell has a private Family Practice in Waldorf and La Plata. Nancy has always worked in her husband's office and has on occasion taught Spanish at the Leonard Hall Jr. Naval Academy in Leonardtown, where she is on the Board of Trustees.

Native Marylanders, the Howells live in Chaptico along the Wicomico River. They have three children.

To quote President Howell, "I believe that the next five years are going to see the most dramatic changes imaginable not only in medicine but also in the Auxiliary. We must work together to insure that the past accomplishments of the Auxiliary are preserved while at the same time initiating changes that will draw in the 'co-professional' physician spouse. Without change, there is no growth; without growth, we start to die. To avoid a lingering death, we must start changing soon."



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Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland. Mrs. Nancy Howell, President; Mrs. Helen M. Reichel, Editor.

Discipline Commission Action

In the Matter of
Thomas N. Carter MD
Before the
Commission on Medical Discipline

Order for Emergency Suspension of License

On or about October 4, 1985, the Commission on Medical Discipline received notice by means of an article in the Baltimore Sunpapers concerning allegations of improper prescribing of controlled dangerous substances by the Respondent, Thomas N. Carter MD. The complaint was referred to the Drug Committee of the Medical and Chirurgical Faculty of the State of Maryland (Med-Chi) for investigation. The Commission received the report of Med-Chi on January 23, 1986 with supporting documents.

The report of Med-Chi contained factual information that the Respondent had continued to prescribe controlled dangerous substances for four patients with full knowledge that the substances were being abused. The report contained further factual information that the Respondent's cognitive knowledge is deficient.

Findings of Fact

Specifically, based on information provided to the Commission set forth above, as well as the information described below, the Commission makes the following findings:

1. Respondent is a physician licensed to practice in the State of Maryland;

2. Respondent came to the attention to the Commission on October 4, 1985 as a result of an article that appeared in the Baltimore Sunpapers containing allegations of the Respondent's improper prescribing of controlled dangerous substances.

3. At the request of the Commission, the allegations were investigated by the Committee on Drugs of Med-Chi, and a report of Med-Chi was received by the Commission on January 23, 1986.

4. Based on that report, the Commission finds that the Respondent prescribed controlled dangerous substances for four patients with knowledge that these patients were drug abusers.

5. That based on Respondent's response to interviews by members of the Committee on Drugs, Respondent either lacks cognitive knowledge regarding the prescribing of controlled dangerous substances, or the Respondent has and continues to prescribe controlled dangerous substances without adhering to an appropriate standard of care.

6. Based on the foregoing findings, the Commission finds reasonable cause to believe that Respondent is in violation of the Annotated Code of Maryland, Health-Occupations, §14-504(4), in that he is professionally, physically, or mentally incompetent.

7. The Commission concludes that for reasons set forth in the foregoing paragraphs, emergency action is required in this case pursuant to State Government Article, §10-405, Annotated Code of Maryland (the Administrative Procedure Act) because in light of Respondent's professional incompetence, his continued possession of a license to practice medicine poses an imminent and grave danger to public health, welfare and safety.

Order

It is this 6th day of February 1986, by the Commission on Medical Discipline of Maryland:

ORDERED that pursuant to the authority vested in the Commission by State Government Article, §10-405 of the Annotated Code of Maryland, Respondent's license to practice medicine is hereby SUMMARILY SUSPENDED; and it is further

ORDERED that on presentation of this Order, Respondent shall immediately deliver to the Commission:

1. His complete license to practice medicine in the State of Maryland, and

2. All permits issued to him to prescribe controlled dangerous substances, and it is further

ORDERED that a hearing shall be held before the Commission within thirty (30) days of the date on which the Commission receives a request from the Respondent for a hearing to consider this emergency suspension.

HILARY T. O'HERLIHY **MD, Chairman**
Commission on Medical Discipline

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In the Matter of
Rashid Gill MD
Before the
Commission on Medical Discipline

Findings of Fact, Conclusions of Law, and Order

Based on certain information coming to the attention of the Commission on Medical Discipline (the "Commission") on August 1, 1984, regarding the medical practice of Rashid Gill MD (the "Respondent"), the Commission requested that the practice of the Respondent be investigated by the Committee on Drugs and the Peer Review Committee of the Medical and Chirurgical Faculty of the State of Maryland (Med-Chi). After the investigation and the receipt of Med-Chi's report, the Commission determined to charge Respondent with violation of Section 14-504(11) and (19) of the Medical Practice Act, Health Occupations Article, Annotated Code of Maryland.

Appropriate notice of the charges and the grounds from which they arose, was given to Respondent by letter dated November 13, 1985. A prehearing confer-

On instruction of the Council of the Medical and Chirurgical Faculty of the State of Maryland, "Findings of Fact, Conclusions of Law, and Order" will be published in the Maryland Medical Journal.

ence was held on January 7, 1986. The following Consent Order was negotiated and was presented to and approved by the Commission.

Findings of Fact

Based on the information known and available to it, the Commission finds that:

1. At all times relevant to this case, Respondent was a physician licensed to practice medicine in the State of Maryland;
2. During the period from April 14, 1982 through April 28, 1982, Respondent was employed by Chesapeake Medical, Inc.
3. During that period, the Respondent saw at least 147 persons and diagnosed 145 of them as having "stress syndrome."
4. In 137 of those cases, the Respondent prescribed 45 tablets of Methaqualone.
5. In seven of those cases, the Respondent prescribed 30 tablets of Methaqualone.
6. In one case, the Respondent prescribed 60 tablets of Methaqualone.
7. These prescriptions were issued without regard for the varying medical conditions and histories of the individual patients.
8. These prescriptions were issued under the direction of Brian Mogosky, a person not licensed to practice medicine.

Conclusions of Law

Based on the foregoing Findings of Fact, the Commission finds that the Respondent violated Section 14-504(19) of the Medical Practice Act in that he practiced medicine with an unauthorized person and that he aided an unauthorized person in the practice of medicine.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law, it is this 18th day of March 1986, by a majority vote of those members of the Commission hearing this case, hereby

ORDERED that the license of the Respondent, Rashid Gill MD, to practice medicine be SUSPENDED for two years from the date of this Order; and it is further

ORDERED that the suspension be STAYED, upon the performance of the following conditions:

1. That the Respondent not engage in a contract of employment that would result in the practice of medicine with an unauthorized person or require the Respondent to aid an unauthorized person in the practice of medicine; and
2. That the Respondent submit to the monitoring of his prescriptions for controlled dangerous substances, by the Commission or its designee, by submitting on a monthly basis beginning the first Monday in the month following the issuance of this Order, copies of all prescriptions containing controlled dangerous substances on precription forms mechanically numbered in seriation; and it is further

ORDERED that on the expiration of two years from the date of this Order, in the event that the conditions of this Order have not been violated, the Commission shall terminate the suspension, upon a petition by the Respondent; and it is further

ORDERED that in the event that the Commission determines, after notice to the Respondent and an opportunity to be heard, that the Respondent has not complied with the conditions set forth herein, the Commission shall impose the suspension and may proceed with such additional charges as the Commission deems appropriate.

HILARY T. O'HERLIHY **MD, Chairman**
Commission on Medical Discipline

Consent

By this Consent, knowingly and voluntarily signed by me solely for the purpose of settlement of these administrative proceedings without admission of any of the allegations contained in the Findings of Fact of the charge letter of November 13, 1985, or in the Conclusions of Law herein, I hereby accept and submit to the foregoing Order and the Findings of Fact and Conclusions of Law in support thereof.

I acknowledge the validity of the Order as if it had been made after a hearing at which I would have had the right to counsel, the right to confront witnesses against me, the right to give testimony, and to call witnesses on my own behalf, and all of the procedural and substantive protections provided by law. I also recognize that by entering into this Consent Order, I am waiving my right to appeal this as an adverse ruling of the Commission. In addition, I acknowledge that I may suffer further disciplinary action against my license to practice medicine in the State of Maryland if I fail to fully comply with the conditions of this Order.

RASHID GILL **MD**

• • •

In the Matter of Antonio Jara MD Before the Commission on Medical Discipline

Order for Emergency Suspension of Medical License

Based on information received from the Committee on Physician Rehabilitation and the Committee on Drugs of the Medical Chirurgical Faculty of the State of Maryland regarding the medical practice of Antonio Jara MD (the "Respondent") and other information

known and available to the Commission on Medical Discipline (the "Commission"), the Commission makes the following Findings of Fact, Conclusion of Law, and Order for an Emergency Suspension of Respondent's license to practice medicine in the State of Maryland.

Findings of Fact

Based on all the information known and available to it the Commission has reason to believe that:

1. At all times relevant to this matter Respondent was and is a physician licensed to practice medicine in the State of Maryland;

2. Respondent is presently practicing medicine as an anesthesiologist at Franklin Square Hospital in Baltimore, Maryland;

3. In 1976, Respondent's medical practice came to the attention of the Committee on Drugs when the Division of Drug Control of the State of Maryland reported that Respondent was improperly prescribing Nembutol and Percodan for his wife;

4. Respondent was counseled by the Committee on Drugs in October 1979 and advised that he should find another physician to care for his wife and he should discontinue prescribing Percodan for his wife;

5. In 1981, the Committee on Drugs once again received survey reports indicating that Respondent was inappropriately prescribing Percodan for his wife and again advised Dr. Jara that he should not treat his wife;

6. In October of 1985, the Committee on Drugs received a report from the Division of Drug Control that indicated that Respondent was prescribing approximately twenty (20) .5mg of Halcion, a controlled dangerous substance, a day to his wife;

7. Halcion, a/k/a triazolom, is a hypnotic legend drug manufactured by Upjohn and is used to alleviate sleeping disorders and the recommended manufacturer's dosage is .25mg to .5mg (i.e. one tablet) before bedtime;

8. An overdose is considered four (4) times the recommended dose or 2.0 mg;

9. During a ten-day period from August 8, 1985 until August 28, 1985, Respondent's wife filled prescriptions written by Respondent for 340 .5mg tablets of Halcion (170 mg) at five (5) local pharmacies;

10. During a ten-day period from September 23, 1985 to October 3, 1985, Respondent's wife filled prescriptions written by Respondent for 280 .5mg tablets of Halcion (140 mg) at five (5) local pharmacies;

11. The symptoms of an overdose of Halcion tablets includes somnolence, confusion, impaired coordination, slurred speech, and ultimately coma;

12. The manufacturer warns that "Addiction-prone individuals, such as drug addicts and alcoholics, should be under careful surveillance when receiving triazolam because of the predisposition of such patients to habituation and dependence. As with all hypnotics, repeat prescriptions should be limited to those who are under medical supervision";

13. After receiving the report regarding the overprescribing of Halcion the Committee on Drugs met with Respondent in November of 1985;

14. During this meeting Respondent refused NOT to prescribe legend drugs for his wife, refused NOT to prescribe Halcion for his wife, refused to allow his wife to attend a drug detoxification program;

15. During the November meeting Respondent admitted that he had supplied his wife with Percodan or Halcion when she was hospitalized for drug addiction without the knowledge of her treating physician;

16. During the November meeting Respondent admitted that he was prescribing Tylox #60 for his wife's aunt and had inappropriately prescribed diabetic medication to nurses at Franklin Square Hospital;

17. During the November meeting Respondent refused to stop prescribing legend drugs and controlled dangerous substances to his wife or to explain the large amounts prescribed;

18. The Committee on Drugs recommended to the Commission that Respondent's license be suspended, his practice be reviewed and that he be evaluated by the Physician's Rehabilitation Committee;

19. Respondent and his wife met with Dr. A, having been referred by the Physician Rehabilitation Committee and were evaluated, after which evaluation both Respondent and his wife refused to comply with the recommended treatment plan;

20. A physician's prescribing of more than one (1) months supply of Halcion, and more than .5mg of Halcion a day to a patient is evidence of professional incompetence;

21. A physician's prescribing of twenty (20) or more .5mg of Halcion to a patient a day endangers the patient's health, safety, and welfare;

22. A physician's prescribing or supplying legend drugs to persons who are not patients or prescribing or supplying legend drugs to persons or patients without a medical examination or evaluation is evidence of professional incompetence and may endanger the person's health, safety, and welfare; and

23. Respondent's medical and prescribing practices are endangering the health, safety, and welfare of his wife, his wife's aunt; and endangering the health, safety, and welfare of the public to whom he is supplying or prescribing legend drugs without a valid medical reason.

Conclusion of Law

Based on the foregoing facts, the Committee finds that the public health, safety, and welfare imperatively requires emergency action in this case, pursuant to State Government Article, §10-405(b), Annotated Code of Maryland.

Order

It is the 24th day of February 1986 by the Commission on Medical Discipline:

ORDERED that pursuant to the authority vested in the Commission by State Law Article, §10-405 of the

Annotated Code of Maryland, Respondent's license to practice medicine in the State of Maryland is hereby SUMMARILY SUSPENDED; and be it further

ORDERED that on presentation of this Order, Respondent shall immediately deliver to the Commission (1) his license; (2) any preprinted prescription pads containing his name and/or Federal Drug Enforcement Administration (DEA) number; (3) Respondent's DEA certificate; and (4) Respondent's State of Maryland controlled dangerous substance certificate.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline

• • •

In the Matter of
Antonio Jara MD
Before the
Commission on Medical Discipline

Findings of Fact
Conclusions of Law, and Order

Certain information having come to the attention of the Commission on Medical Discipline of Maryland (the "Commission"), the Commission on February 24, 1986, emergency suspended the license of Antonio Jara MD (the "Respondent") pursuant to State Government Article §10-405. By letter dated March 4, 1986 the Commission charged Respondent under Health Occupations Article, Sections 14-504(2), (3) and (4). A prehearing conference was scheduled for March 4, 1986 and held that day. After discussions at the prehearing conference the Administrative Prosecutor and Respondent submitted a recommendation to the Commission for settlement of the case. As a result of these negotiations the Commission agreed to enter into the following Consent Order with Respondent.

Findings of Fact

1. At all times relevant to this case the Respondent was licensed as a physician in Maryland and practicing medicine as an anesthesiologist at Franklin Square Hospital;

2. Halcion, a legend drug manufactured by Upjohn, a/k/a triazolam, is a hypnotic legend drug (a benzodiazepine) used for sleep disorders. The manufacturer's recommended dosage of Halcion is .25mg to .5mg a day;

3. The manufacturer's package insert states: "Overdosage may occur at four times the maximum recommended therapeutic dose . . . Because of the potency of triazolam overdosage may occur at 2 mg., four times the maximum recommended therapeutic dose (0.5mg.) Manifestations of overdosage with HALCION Tablets include somnolence, confusion, impaired coordination, slurred speech and ultimately, coma";

4. The manufacturer package insert on Halcion warns that "Addiction-prone individuals, such as drug addicts and alcoholics, should be under careful surveillance when receiving triazolam because of its predisposition of such patients to habituation and dependence. As with all hypnotics, repeat prescriptions should be limited to those who are under medical supervision";

5. From August 30 1985 until October 26, 1985, Respondent issued prescriptions for 880 .5mg of Halcion, to his wife. His wife had these prescriptions filled and used this medication. In the year preceding August 30, 1985, Respondent issued prescriptions for at least 4100 .5mg of Halcion that Respondent's wife had filled and used;

6. Respondent's stated purpose in issuing these prescriptions was to allievate his wife's pain;

7. Respondent issued these prescriptions when Respondent was not the treating physician;

8. Respondent issued prescriptions for Respondent's wife's aunt and one other person when Respondent was not the treating physician;

9. From 1976 until November 1985 Respondent was advised on three (3) occasions by the Committee on Drugs of the Medical Chirurgical Faculty to stop prescribing legend drugs for his wife;

10. There was no legitimate medical purpose for Respondent's prescribing as much as 10 mg of Halcion per day for his wife, and the prescriptions for Halcion issued by Respondent for his wife were not issued in the usual course of professional treatment;

11. Prescribing legend drugs to person(s) who are not patients and prescribing legend drugs to persons or patients without a medical examination or evaluaton is evidence of professional incompetence;

12. Respondent's practice at Franklin Square Hospital has been monitored over the past year, and his medical practice at the hospital is competent;

13. Respondent has not prescribed Halcion for his wife since November 1, 1985.

Conclusions of Law

Based on the foregoing Findings of Fact, the Commission concludes as a matter of law that

1. Respondent "Is professionally . . . incompetent"; §14-504(4) of the Act;

2. Respondent DID NOT "Fraudulently or deceptively use a license"; §14-504(2) of the Act and

3. Respondent IS NOT "Guilty of immoral conduct in the practice of medicine." §14-504(3) of the Act.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law, it is this 7th day of March 1986, by a unanimous vote of those members of the Commission on Medical Discipline of Maryland who considered this case,

ORDERED that Respondent's license to practice medicine in the State of Maryland heretofore issued to

the Respondent is hereby REVOKED; and be it further

ORDERED that the foregoing Revocation shall be immediately STAYED, with Respondent placed on PROBATION subject to the following conditions:

1. Within thirty (30) days from the effective date of this Order, Respondent shall submit to the Commission the name of a psychiatrist who specializes in drug abuse and drug codependence. The psychiatrist shall not be an individual with whom the Respondent has a personal or professional relationship or who works at Franklin Square Hospital. Within fourteen (14) days from the date of receipt of the name of the psychiatrist the Commission shall inform the Respondent whether the psychiatrist is approved. In the event that the Commission does not approve the psychiatrist selected by Respondent as appropriate to treat or evaluate Respondent it shall inform Respondent of its reasons and Respondent shall submit another name within thirty (30) days;

2. The Commission will refer Respondent to the approved psychiatrist by a letter that outlines the reasons the Commission requires the Respondent to be evaluated;

3. Within thirty (30) days after receipt of the letter from Commission described in (2) above the psychiatrist will submit to the Commission a written report regarding his/her evaluation and regarding Respondent's competence to practice medicine and whether there is a need for Respondent to enter therapy;

4. In the event that the psychiatrist determines that Respondent needs therapy, Respondent shall follow the psychiatric recommendations of the approved psychiatrist as set forth in the written report described in (3) above and continue in therapy until the therapist certifies to the Commission in writing that the Respondent is discharged;

5. In the event that Respondent terminates therapy prior to discharge by the therapist the therapist shall immediately notify the Commission in writing;

6. Respondent shall not render medical diagnosis, care, and treatment to any member of his immediate family, unless on an emergency basis, in which case Respondent shall inform the Commission within five (5) days of rendering such treatment of the circumstances requiring treatment;

7. Respondent shall not prescribe any legend drugs to any individual outside his practice of anesthesiology at Franklin Square Hospital;

8. Respondent shall take ten (10) credits of continuing education course in pharmacology that is preapproved by the Commission, and which shall not be counted as part of the continuing education requirements necessary for renewal of Respondent's license;

9. Respondent's medical practice shall be evaluated during the first year of his probation on a biannual basis by the Medical Chirurgical Faculty Committee of Drugs (the Committee);

10. After the first year of probation if the Committee has found no evidence of incompetence in Respondent's medical practice, the Committee shall evaluate Respondent's medical practice on an annual basis;

11. The Committee shall submit a written report to the Commission thirty (30) days after each evaluation,

12. Respondent shall submit to the Commission a list of the hospitals where he has privileges;

13. Respondent's supervisor at Franklin Square Hospital and any other supervisor at any other hospital where Respondent has privileges shall submit written reports to the Commission biannually, commencing six (6) months from the effective date of this Order, evaluating Respondent's medical practice; and

14. Respondent must practice medicine competently and in accordance with the laws in effect for the State of Maryland; and be it further

ORDERED that if the Respondent violates any of the foregoing conditions of probation, the Commission, after notification and a hearing may lift the stay of revocation and impose any disciplinary sanctions it deems appropriate; and be it further

ORDERED that three (3) years after the effective date of this Order, the Commission will entertain a petition for termination of Respondent's probationary status. At such time if the Commission determines that Respondent has complied with the conditions of probation the Commission will reinstate Respondent's license to practice medicine without any conditions; and be it further

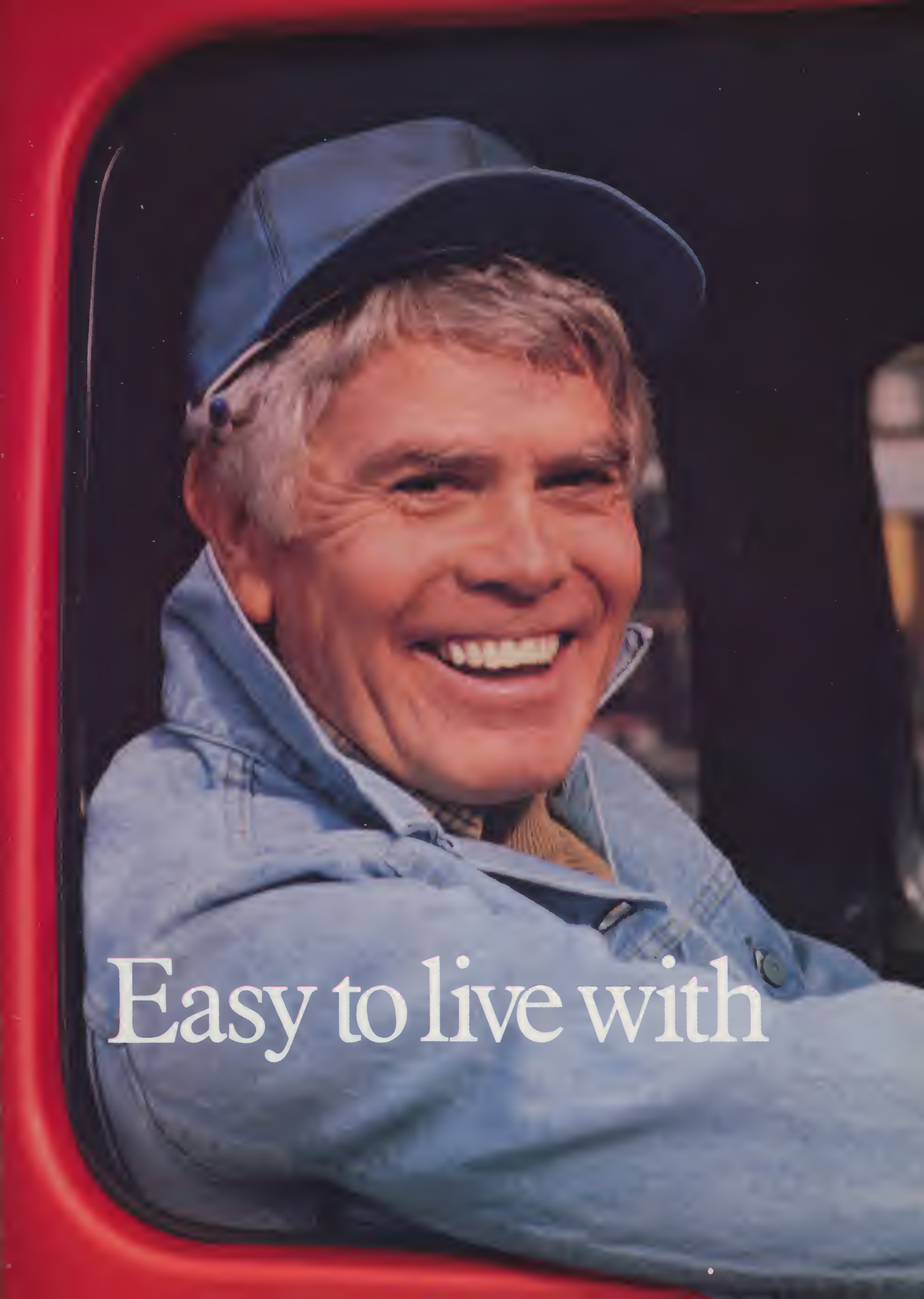
ORDERED that the Commission's Order dated February 24, 1986, suspending Respondent's license on an emergency basis, shall be immediately vacated upon the effective date of this Order, that date being the date on which the Commission signs the Order.

HILARY T. O'HERLIHY **MD, Chairman**
Commission on Medical Discipline

Consent

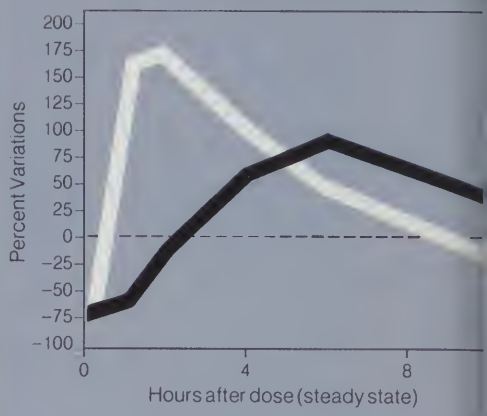
By this Consent, I hereby consent and submit to the foregoing Order and its conditions. I do not admit the truth of the charges, but I acknowledge the validity of the Order as if made after a hearing in which I would have had the right to counsel, to confront witnesses, to give testimony and to call witnesses on my own behalf and to all other substantive and procedural protections provided by law. I also recognize that I am waiving my rights to appeal from this order. By this consent, I waive all such rights and acknowledge that by my failure to abide by the conditions set forth in this Order, I may suffer disciplinary action against by license to practice medicine in the State of Maryland.

ANTONIO JARA **MD**


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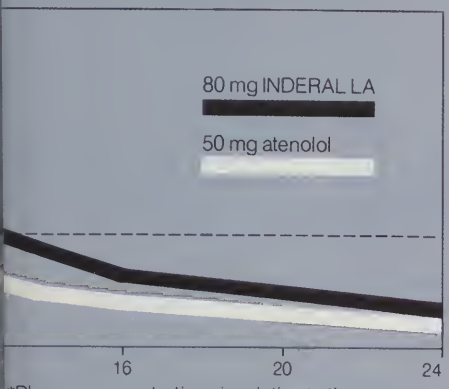
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tenolol over 24 hours*[1]



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INDERAL LA AND INDERIDE LA Capsules should not be considered simple mg-for-mg substitutes for INDERAL and INDERIDE Tablets. Please see package circulars.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Once-daily INDERIDE® LA

Each capsule contains propranolol HCl (INDERAL® LA), 80 mg, 120 mg, or 160 mg, and hydrochlorothiazide, 50 mg



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NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension, paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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REFERENCES

1. Data on file, Ayerst Laboratories. **2.** Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321-1323. **3.** Sumiye L, Vivian AS, Frisof KB, et al: Potassium loss associated with hydrochlorothiazide versus chlorthalidone. *Clin Ther* 1981;4:308-320. **4.** Ram CVS, Garrett BN, Kaplan NM: Moderate sodium restriction and various diuretics in the treatment of hypertension. *Arch Intern Med* 1981;141:1015-1019.

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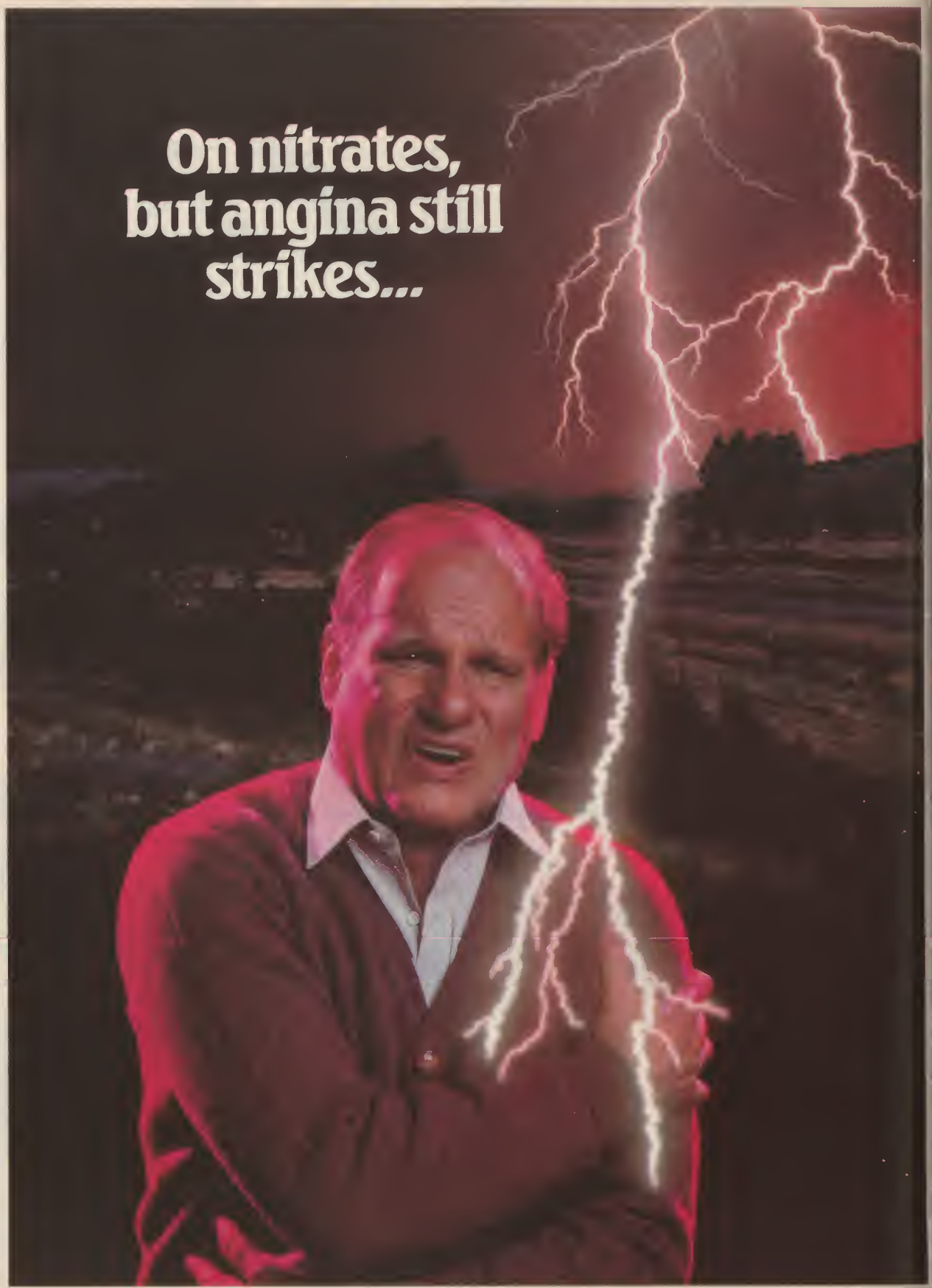
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Contraindications: Severe left ventricular dysfunction (see *Warnings),* hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.)* Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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Autologous Transfusion: The Treatment of Choice

ALI DANESHVAR MD

The number and gravity of transfusion-transmissible diseases (TTD) are increasing. While posttransfusion hepatitis remains one of the most serious complications, since 1981 the number of AIDS cases in transfusion recipients has increased significantly. Debate about the efficiency of various blood donor policies and screening procedures versus their social and economic implications continues. While the medical profession is concerned with the control of TTD, full utilization of autologous blood as a source of the most suitable blood and as a definite preventive measure is being neglected. In our experience with 934 patients donating 1,377 units of blood, no complications were observed, and it is reasonable to conclude that autologous transfusion is the treatment of choice.

Dr. Daneshvar is Director of Blood Bank at The Union Memorial Hospital in Baltimore.

Since the late 1960s, there has been a renewed interest in autologous transfusion, beginning with selected cases, mostly orthopedic and plastic surgeries.[1-3] Later, the safety of autologous transfusion was proved repeatedly by numerous investigators. Reports of Mann *et al.*,[4] Flemming *et al.*,[5] and Lubin *et al.*[6] have emphasized the safety of predeposit autologous donations in high-risk candidates. Zuck[7] has outlined the physiologic response of donors during predeposit autologous donations and has illustrated its advantages in difficult clinical situations. Paxon[8] and Brandes *et al.*[9] have provided the idea of collection and transfusion of placental blood and its use in the care of neonatal patients.

During the past 15 years, blood utilization has been constantly increasing, due in part to the marked rise in cases of elective and emergency surgeries. At present homologous blood is used almost exclusively in situations when autologous transfusion would be entirely appropriate. Nevertheless, homologous blood is not entirely free of risk, a major problem being the transmission of disease from donor to patient. Despite rigid screening methods, it is not always possible to exclude donors with diseases that may have serious consequences for the recipient.

The purpose of this article is a) to provide compelling reasons that autologous transfusion should be considered in any surgical intervention where blood transfusion is deemed necessary; b) to present the results of our experience with large scale, indiscriminate participation of any patient, regardless of the type of surgical procedure and the age of the patient; and c) to evaluate basic guidelines of marketing autologous transfusion as a service to physicians and the patients.

Methods

Blood from patients undergoing elective surgery with the anticipated need for transfusion was drawn within 35 days before surgery. The population consisted of patients being admitted to a 415-bed teaching community hospital between January 1980 and July 1985 and a satellite 110-bed hospital between January 1980 and September 1983. The selection of patients was totally random as far as blood bank's initiatives were concerned. The cases were predominantly orthopedic surgery, general surgery, plastic surgery, gynecological and, rarely, obstetrics patients. Blood bank volunteers, after obtaining the admitting physician's permission, telephoned the patients to inform them of the option and to recommend autologous donation. Patients' eligibility was based on criteria of American Association of Blood Bank (AABB) standards.[10]

Blood Collection Before each donation, hematocrit (Hct) was determined on duplicate capillary Hct tubes. Blood units were collected in CPD A-1 preservative, maintained at 4°C, and infused as whole blood. Since January 1985, patients older than 70 years and younger patients with severe cardiovascular disease received volume-by-volume replacement of normal saline solution (herein called saline substitute). To stimulate erythrocyte regeneration all candidates were asked to take an oral iron preparation of their choice three times daily. All phlebotomy procedures and blood processing were performed in accordance with AABB standards.

Results

A total of 1,377 units was donated by 934 patients, each donating from one to five units (Table 1). Female subjects were from 11 to 86 years old (mean = 45.09). Male subjects were from 15 to 82 years old (mean = 51.96). Ten donors in their eighties donated 14 units, including one 85-year-old who donated 3 units. Mean Hct at the time of the first donation was 40.18 for females and 43.87 for males. The rate of drop of Hct in

Table 1. Frequency of Blood Donations

	Number of First and Subsequent Donations				
Patients	1st	2nd	3rd	4th	5th
Male	340	182	55	18	2
Female	594	171	33	8	0
Total	934	353	88	26	2

subsequent donations decreased steadily (Table 2). A total of 28 patients were rejected, because of low Hct. The amount of blood in 16 units (1.2 percent) was not sufficient for transfusion (less than 270 ml). Eight patients had positive atypical antibody screen; however, the type of antibody did not appear to cause problems with crossmatching. One patient had a strong (3+) direct antiglobulin test secondary to Aldomet therapy. A total of 22 patients had a history of hepatitis, with two additional patients having positive HBsAg. None of our patients presented themselves as belonging to Jehovah's Witnesses. From the 227 units donated in 1984, 67.5 percent was transfused to the donors, 18.5 percent was released for other patients, and 14 percent was discarded as outdated. The high rate of outdating was because blood units were maintained for the donor until approximately two days before the expiration date.

In the satellite hospital, which is a center predominantly for orthopedic and plastic surgeries, the proportion of predeposit autologous transfusion to total number of units transfused increased from 0.4 percent in 1978 to 22.6 percent in 1983. This information is not available for the main hospital.

Twenty-seven surgeons participating in the program were surveyed about side effects and complications. Twenty-two surgeons responded (81 percent response rate) from which 21 indicated no complications and the other indicated a negligible complication of undetermined nature.

Marketing

The core product is blood intended for transfusion. In the United States only human blood drawn from living individuals is transfused. This excludes heterologous blood (zoogenous, that is, derived from animals) and blood drawn from recently expired cadavers. Blood obtained from an individual is called "homologous" when it is intended to be transfused to another individual, and it is called "autologous" when it is intended to be transfused to the original donor. There are several types of products representing different modalities of procuring blood, namely, predeposit autologous, where blood is obtained several days before operation; perioperative hemodilution; and intraoperative salvage. Autologous transfusion is discussed as a service package with special attention to predeposit autologous service. For further details about other modalities, the reader is referred to available publications.[11-14]

The public has a distorted opinion about blood transfusion, as confirmed by recent surveys conducted by the Roper Organization and by the American Association of Blood Banks.[15] This obligates the blood banks to be more responsible in providing the most suitable product for the consumer and in educating them about their options.

Several characteristics differentiate autologous blood from homologous blood. Obviously, autologous blood is entirely compatible with that of the patient. The risk of transfusion-transmissible disease (TTD) is eliminated, as are exposure to foreign antigens and antibodies and the occurrence of transfusion reactions. Testing errors are negligible. Blood-flow dynamics are improved, and bone marrow erythrocyte production is stimulated. Moreover, the availability of blood is guaranteed and cost reduction is possible. Finally, this procedure is more easily accepted by some religious groups.[16]

TTD is by far the strongest and most compelling issue in product differentiation. In the following sections, TTD is evaluated from epidemiologic and preventive points of view.

1. *Viral hepatitis* is the most frequently occurring disease transmitted by blood transfusion. There are several types of posttransfusion hepatitis (PTH).

Hepatitis A, caused by Hepatitis A virus (HAV) is transmitted primarily by person-to-person contact. Transmission of HAV by blood transfusion has occurred but is rare.[17,18]

Hepatitis B, caused by Hepatitis B virus (HBV) is a major cause of acute and chronic hepatitis, cirrhosis, and primary hepatocellular carcinoma. In western countries, it is a disease of low endemicity. The United States currently contains an estimated pool of 500,000 to 1,000,000 infectious carriers.[19] Transmission of infection by transfusion of contaminated blood or blood products accounts for 10 percent to 15 percent of PTH.[20,21] There has been a marked reduction in recent years due to HBsAg screening and the change from commercially based to volunteer blood donors.[22] Subclinical infection with HBV may result in an asympto-

Table 2. Hematocrit Changes in Subsequent Blood Donations

	1st	2nd			3rd			4th		
	Mean	Mean	Drop	%	Mean	Drop	%	Mean	Drop	%
Male	43.87	41.12	2.75	6.26	39.50	1.62	3.93	38.69	0.81	2.05
Female	40.18	37.75	2.43	6.04	36.74	1.01	2.67	36.25	0.49	1.36

matic carrier, and at least a small proportion of these carriers are known to have HBsAg below the usual detection limits of screening tests. HBV carriers deserve particular attention when receiving transfusion, possibly requiring autologous transfusion.

Delta hepatitis is caused by a unique defective RNA virus that requires the presence of hepatitis B surface antigen to replicate. Delta agent seems to be transmitted only via the parenteral route.

As mentioned above, blood that is negative for HBsAg according to the most sensitive technique may still contain infectious HBV and thus be a vehicle for transmission of hepatitis delta virus.[23] The risk of transmitting hepatitis delta agent with blood that appears to lack HBsAg is low, but not negligible. Given that hepatitis B develops in less than 1 of 100 recipients of blood with negative tests for HBsAg, the absolute risk of transmitting hepatitis delta virus with blood is estimated to be less than 1 in 3,000 transfusions.[24]

Non-A, Non-B hepatitis, caused by as yet unknown agent(s) remains the most problematic PTH. Evidence suggests that more than one virus may be involved,[25,26] or that any Non-A hepatitis may be, in fact, B hepatitis.[27] Non-A, Non-B hepatitis constitutes about 85 to 95 percent of PTH[28] and has a variously reported attack rate of 7 percent,[19] 10 percent,[29] 12.3 percent,[30] and up to 25 percent.[20,31] Thus an average value of 10 percent means that one of ten individuals transfused will develop liver function changes suggestive of acute hepatitis. Although some of these cases are asymptomatic and will go undetected, approximately 50 percent will develop symptomatic disease.[32] About 23 percent,[33] 46 percent,[34] 65 percent,[35] and 70 percent[36] of posttransfusion Non-A, Non-B patients will progress to chronic active hepatitis, and about 10 to 20 percent[27] will develop cirrhosis of the liver. Moreover, some patients in whom tentative diagnosis of Non-A, Non-B hepatitis was made after transfusion have developed heptaocellular carcinoma 13 to 30 years later.[28]

In statistical terms, each year in the United States, from approximately 3,000,000 recipients, 300,000 will develop PTH, 150,000 will develop chronic active hepatitis, and about 15,000 will develop cirrhosis of the liver. In an effort to validate a similar set of data, Hornbrook *et al.*,[37] by an independent estimate of the number of deaths from cirrhosis contributed to by transfusion-associated hepatitis, present a figure between 1,700 to 3,400 per year. Currently, however, there are no satisfactory methods to identify persons who are susceptible to, immune to, or are carriers of Non-A, Non-B hepatitis.[28] The diagnosis is that of exclusion, and since reporting from many localities is incomplete, the actual number of hepatitis cases occurring annually is thought to be several times the reported number. Whatever the actual number might be, Non-A, Non-B posttransfusion hepatitis is more likely to become chronic than is hepatitis B,[20,34] and some believe that the exclusion of Non-A, Non-B hepatitis virus at the time of blood transfusion is more important than that of hepatitis B virus.[27,37]

Among many claims made recently is that a retrovirus or a retroviruslike agent(s) with particle-associated reverse transcriptase activity is responsible for Non-A, Non-B hepatitis,[39] and that a highly sensitive immunocytochemical procedure has been developed to detect Non-A, Non-B hepatitis antigen. It is hoped the test will detect low levels of antibody in convalescent sera.[40] The practical value of these discoveries remains to be proved and there is no apparent solution in the near future.

It has been suggested that donors be screened for serum alanine aminotransferase (ALT) since prolonged elevation of ALT correlates with liver dysfunction and can be used as an indicator of Non-A, Non-B virus carrier state. It has been predicted, but not proved, that exclusion of donors with elevated ALT at 2.25 standard deviations above the mean of the volunteer donor population could prevent 29 percent of the PTH cases.[41] The test will not affect the remaining 71 percent of the cases. Also, 72 percent of donors with elevated ALT were not implicated in hepatitis transmission.[35]

Although the test is currently performed in some European countries and some blood banks in the United States, its value and cost effectiveness in the U.S. are debatable.[42,43] The ad hoc committee on alanine aminotransferase testing did not recommend routine testing of donor blood for this enzyme.[44] There is, however, concern that not all cases of PTH are attributable to blood transfusion, and in a few cases there is no indication for a causal connection between blood transfusion and hepatitis type B.[45,46] Hospitalization and surgery may play a role in the risk of acquiring hepatitis in nontransfused patients (attack rate of 2.2 percent).[47]

2. *Acquired Immune Deficiency Syndrome (AIDS)*, convincingly caused by "human T-cell lymphotropic virus type III" (HTLV-III),[47–49] is an epidemic, generally fatal disorder involving helper T-cell depletion and multiple opportunistic infections and/or malignancies.[50] The virus can be transmitted through blood transfusion,[51,52] and it may cause a broad spectrum of diseases in infants.[53] The median time from transfusion to diagnosis of AIDS is 29 months for adults and 14 months for infants.[51] In over 90 percent of transfusion-associated AIDS, HTLV-III is recovered from peripheral lymphocytes collected from the high risk donors 12 to 52 months after the blood donation.[54] Most blood donors implicated in the transmission of the virus are

chronic carriers who have minimal or no symptoms.

In March 1983, before identification of the causative virus, the U.S. Public Health Service published guidelines for prevention of AIDS, recommending that individuals in defined "high-risk" groups of AIDS voluntarily refrain from blood donation.[55] It also required blood banks to apply interim measures to prevent the collection of blood or plasma from individuals who might be at increased risk of transmitting AIDS. Later, an Enzyme-Linked Immunosorbent Assay (ELISA) was developed to detect antibodies to HTLV-III as an indicator of previous exposure of an individual to the virus. In January 1985, the Public Health Service published recommendations that all blood or plasma should be tested for HTLV-III antibody by ELISA.[56] Any blood or plasma that is positive must not be transfused or manufactured into other products.

There is evidence that volunteer blood donors have cooperated with required procedures of voluntary self-exclusion,[57] and the blood bankers responded to the established policies in a timely manner.[58] Yet, since 1981, the proportion of AIDS cases in transfusion recipients has increased significantly, while the proportion of cases in other patients has decreased significantly.[59] This may, of course, be due partially to the long incubation period of the disease, but it is anticipated that despite educational efforts to dissuade high-risk donors from donating blood, 10 percent of them would donate in order to receive HTLV-III test results.[60] In fact, even though special screening of donors for AIDS has been in effect, persons with HTLV-III antibody and virus were still donating blood.[61,62] The specificity and sensitivity of ELISA test for HTLV-III are high (98.6 percent and 97.3 percent, respectively).[63] However, given the less than 100 percent sensitivity of the test, introduction of antibody screening, under current notification policies, could conceivably increase the risk of transfusion-associated cases of AIDS.[60] These controversies have contributed to unprecedented ethical, medical, legal, and social problems.[64–70] While there is need for revised blood donor policies to ensure continued safety of transfusion, unresolved complex issues remain, and speculations about the future are rising.

3. *Adult T-cell leukemia* Although endemic in southern Japan with a similar virus isolated from Mycosis fungoides or Sezary Syndrome, the evidence strongly suggests that infectious adult T-cell leukemia virus is associated with a cell component, presumably lymphocytes, and is transmitted by blood transfusion.[71] There is a close relationship between this virus and HTLV-III.

4. *Serum Parvoviruslike Particles (SPLV)* appears to be the agent of what was called the "fifth disease." It is the cause of posttransfusion aplastic crisis in patients with chronic hemolytic anemias. More than a third of the normal population have anti-SPLV antibody before the age of 16. The danger of transmitting the infection by red cell transfusion is almost nil[72] (as for hepatitis A virus).

5. *Cytomegalovirus (CMV)* CMV seroconversion in blood recipients is strongly associated with development of PTH, and up to 15 percent of the cases previously diagnosed as Non-A, Non-B hepatitis may, in fact, be due to CMV infection.[34] The average posttransfusion acquisition of CMV is about 30 percent of the recipients. The incidence is related to the number of blood donors and the total volume of transfused blood.[73] The clinical significance is considered to be minimal, and over 90 percent of the patients are asymptomatic. Symptomatic disease predominantly involves premature infants, transplant recipients, immunocompromised oncology patients, and patients undergoing open heart surgery.[74] It is estimated that 5 to 12 percent of the donors are infectious carriers. Epstein-Barr virus, causing symptoms similar to CMV, is very rarely implicated in postperfusion syndrome.[75–76]

6. *Herpes virus, toxoplasma, yellow fever virus*, and possibly other *hepaticomimetic viruses* may be transmitted by transfusion, but the role of these viruses in the overall transfusion hepatitis is considered to be insignificant.[77]

7. *Malaria* Transfusion-transmitted malaria is often severe or even fatal due to delayed diagnosis or serious underlying disorder of the recipient.[78] Potential blood donors who have had malaria at any time, or have taken antimalarial prophylaxis, are deferred from donation for three years after ceasing therapy or after departure from the malarial areas. Travelers returning from endemic areas who have not had malaria and who have not taken prophylactic antimalarial drugs may donate after six months.[10]

Despite these precautions, transfusion-associated malaria is still reported very infrequently in the United States, although nine cases were reported to the CDC in 1982 (the highest number in 25 years).[79] Worldwide, however, it is the second most common transfusion-transmitted disease. Owing to lack of a practical, inexpensive laboratory screening test for malaria, blood collection facilities must rely on personal interviews with prospective donors, a practice that clearly is not foolproof. The recent preparation of an indirect fluorescent antibody from *Plasmodium falciparum* may partially overcome this problem.[80]

8. *Alloimmunization* The risk of developing antibodies after multiple transfusions is considerable. Such antibodies may compromise the care of a patient when the necessity of future transfusions arises. Patients receiving chronic transfusions for aplastic anemia, hemoglobinopathies, and chronic renal failure are at high risk, while patients with lymphocytic leukemia are at lower risk.[81] The risk increases with the number of blood units transfused, and the incidence is reported to be 1 to 1.4 percent per unit of blood.[82]

Warm autoimmune hemolytic anemia after posttransfusion alloimmunity is rare.[83]

9. *Recurrence of malignancy* Preliminary reports indicate that perioperative transfusion is associated with recurrence after curative cancer surgery.[84,85] This is possibly due to the nonspecific immunosuppressive effect of homologous blood transfusions.[86] It is shown that in animals, allogenic blood transfusion adversely affects host resistance to tumor growth.[87]

Multiple transfusions started early in life may cause immune modification and some form of immune tolerance to red cell antigens.[88,89]

Market Survey

In July 1981, I conducted a preference test, asking the opinion of 100 blood bank directors and 100 directors of surgical programs in teaching hospitals, presumably representing the experts in the field. I asked, "[I]f you were to undergo elective surgery requiring transfusion, which would you prefer: self-deposit autologous, homologous, or no preference?" The overall response to the poll was 83.5 percent. Of those responding, 86.4 percent chose autologous transfusion, 10.1 percent had no preference, and only 3.5 percent preferred homologous transfusions.

This survey was conducted before the outbreak of AIDS (the first case of transfusion-associated AIDS occurred in December 1982), which suggests that such a survey at the present time would prove even more favorable to autologous transfusion. Anecdotal evidence validating these results is that all physicians undergoing elective surgery in our institution have predeposited their own blood. The question, therefore, is: If the experts prefer autologous transfusion, should not the patient receive it? This is an easy question to ask but not so easy to answer.

Market Characteristics

The provider of blood The American Red Cross is the major U.S. blood supplier, providing about 50 percent of the blood used for transfusions and related blood products. The second largest source is independent nonprofit blood centers: community hospital blood banks, which provide about 35 percent of the supply. Some 2,200 of these centers are organized nationally as the American Association of Blood Banks (AABB). Smaller amounts of blood are collected by a group of Red Cross-affiliated community blood banks and commercial blood banks that pay donors cash for blood. These four sources tend to tap different groups of blood donors.[90] The products of the American Red Cross and community blood banks consist almost totally of homologous blood, with recent activity in autologous transfusion programs, which is important since the establishment of autologous programs would shift blood donations, at least partially, from blood centers to hospitals.

Involvement of American Red Cross in autologous donation would eliminate adverse competition between these resources.

Purchasers A distinction should be made between autologous donations and autologous transfusion. Although they both involve the same patient, the processes of decision making and other implications are quite different. The decision-making unit for an autologous donation is rather complex with several entities participating in the decision. The role and respective influence of the various entities is variable and interchangeable. The following roles can be differentiated:

1. The initiator—This may be the physician, the blood bank, or the patient. In our institution, the blood bank initiates the idea.
2. Influencer—The person who carries explicit influence in the final decision. This role should be played by the patient's physician, since he/she is in the best position to influence the patient. Moreover, a physician's prescription is mandatory for donation to take place.
3. Decider—It is the ultimate responsibility of the patient to decide whether to donate, and if he/she agrees, the patient must sign a consent to perform the donation.
4. The buyer—Payment for service is usually provided by a "third-party" payer.

Target market Blood is generally used in a hospital setting. The hospital blood bank is responsible for all the blood transfusion-related functions in a hospital. A unit of blood is released for a patient only by prescription from a physician. This creates some unusual target markets, which are defined by social contracts governing patient-physician relationships. The patient, as a final consumer, does not have a direct decision-making role over the product he or she consumes. The actual transaction takes place between the patient's physician and the blood bank in the best interest of the patient.

From this particular point of view, the physician may be considered the consumer of the services, or at least, the decision maker for consumption. A characteristic of physicians is that they are hard to convince, which turns out to be a blessing. To divert a physician from his frame of experience needs more than a rational explanation. Rather, the subject must be tried and proved to have passed the test of time, since adverse effects may not be revealed until many years later. The marketing implications are: (a) that changing well-established trends among physicians is time consuming, and (b) that necessary information and communication should be directed through appropriate channels.

Size of the market In 1982, a total of 12,661,882 units of blood were transfused. It is estimated that approximately 40 to 60 percent[91] of this supply could have been provided by autologous donation.

Market research The above-mentioned physician's opinion survey provides convincing market research. Since it explores the experts' preference, it has the added value of indicating the direction that must be followed to improve and succeed in the endeavor. As Plato believed, if one of your beloved ones becomes ill, you will not seek the opinion of the laymen on the street as to what to do, rather you ask the opinion of the experts in the field. Hence, the market research on autologous transfusion is conducted on those who know about it rather than the public at large. This is, of course, advantageous to the patient. "Then is it not true that no doctor, so far as he is a doctor, seeks or commands the advantage of the doctor, but only the advantage of the patient?"[92]

Consumer Research

Although a structured formal consumer research has not been conducted, limited retrospective data from our own practice are outlined below.

More than a thousand patients scheduled to undergo elective surgery were contacted in regard to autologous donation, and their responses were recorded briefly. Approximately 70 percent of those contacted responded positively, and the remaining 30 percent responded negatively. (Lately, this proportion has increased.)[93]

1. The most frequent motive for those who responded positively was the rational appeal—the idea is rationally sound.
2. A minor portion of positive respondents are motivated by emotional appeal. For example, the outbreak of AIDS plays a major role in their decision.

In either of the above, the patient's attitude is positively conditioned by the physician's advice.

The following are reasons for negative responses (in order of frequency):

1. They feel they are sick and should not give blood.
2. They fear the needle.
3. They belong to various blood assurance groups, and thus, do not have to give blood for their operation.
4. Very rarely, they believe that they are sick and blood from a healthy donor will be curative.

Among additional unexpressed concerns is a suspicion that the blood bank will make money from their blood.

The above data clearly indicate the lack of education on the subject by the general public, and although preliminary, provide valuable material in research design.

To gather pertinent information, a focus-group interview may be conducted. In such a procedure, a few patients who have donated in the past and a few who have refused to donate are invited for a group discussion. Information gained from such a meeting can be used for further planning or for construction of an effective educational and motivational tool.

Advertising: Market Segmentation

Over the long term, the total population at some time may become part of the market for autologous transfusion. In the short term, all patients undergoing elective surgery who might need blood transfusion(s) are the market. Not all these patients, however, will be able to donate.

Although any patient who can tolerate the physical stress of a major surgery is considered to be eligible to donate his/her blood without excessive risk, there are certain guidelines and requirements to be eligible for autologous donation.[10] Thus, only a fraction of the patients will be accepted as candidates. The screening and evaluation for eligibility is performed just before donation.

Communication Media

Since the market segment for the short term, fairly well defined, and easily accessible, several less costly media can be used. A brochure or pamphlet written in layman's language explaining the advantages of the procedure can be included with the package every patient receives at the time of scheduling for surgery.

Using a direct communication channel, upon scheduling for surgery, an individual from the blood bank may contact the patient to explain the procedure and

to answer any patient questions. In our institution several well-informed, dedicated volunteers have carried out this program with enormous success. The more complex questions are referred to the appropriate personnel. If the patient accepts the idea, an appointment will be made for donation.

Long-range communication through mass media can be used to inform large undifferentiated audiences; for example, television interviews during the height of public emotion about AIDS might have emphasized autologous transfusion as a solution.

Publicity of nonpersonal informational articles in published media is one route. Publication of scientific articles in reputable medical journals that usually are quoted by other mass media probably would be the most effective publicity since these have high acceptability by both physicians and the public.

To have a strong impact on attitude and behavior, public service spots can be presented on television or radio. For example, *DO WHAT THE EXPERTS WILL DO. DONATE YOUR OWN BLOOD FOR YOUR OPERATION*; or, *WHY SHOULD YOU DONATE YOUR BLOOD FOR YOUR OWN OPERATION?* Then list major reasons; or *YOU HAVE A CHOICE, USE YOUR OWN BLOOD FOR YOUR OPERATION. YOUR BLOOD IS THE BEST.*

Another form of marketing communication in this area is regulation. Blood banks are closely regulated by the Food and Drug Administration and many other agencies, American Association of Blood Banks (AABB), College of American Pathologists (CAP), for example. Most hospitals are regulated by the Joint Commission of Accreditation of Hospitals (JCAH). Both AABB and JCAH require a hospital transfusion committee and have charged this committee with promulgation of policies and provision of an overview of transfusion practices in the hospital. This authority is reflected in the bylaws of the hospital and requires compliance by all medical staff. Approval of a policy such as "autologous transfusion is the treatment of choice unless clinically contraindicated" will mandate all medical staff to consider this procedure as the first choice to provide blood for their patients. Such a policy is established in the hospitals served by our blood bank.

Evaluating Results

The previously mentioned focus-group interview can be effectively used for developing messages for advertisements and for evaluating results.

A historical evaluation will easily reflect the extent of the response.

The cost efficiency depends on the scope of evaluation. All the publicity and communication effects may be achieved with a minimal budget, hence any possible outcome is at least cost effective. In one study, the estimated direct medical cost per each case of Non-A, Non-B hepatitis was $1,181.[94] In another study, the cost of hospitalization of each patient with acute symptomatic hepatitis was estimated at $5,201.[36] Of these patients, 1 to 7.2 percent will die in the hospital at a total resource cost of $91,121 per death. However, preventive medicine is a national issue: it does not generate revenue, and the administration of a hospital may perceive this as a lost revenue rather than a saved cost. Yet from another viewpoint 18.5 percent of donated blood was used as homologous blood which is a revenue generator.

Comment and Conclusion

In many instances, some attributes that consumers state are highly important to them do not appear to influence their final choice of product. For example, many consumers rate auto safety as highly important in buying a car. Yet, they normally do not shop around and investigate the safety level of different cars. Although safety is important, the consumer largely believes that most cars are "safe enough."[95] The public generally has a vague idea about the risks one takes when receiving transfusions. Furthermore, they are not aware of available alternatives.

While it is accepted that the best clinical decision is to avoid transfusion if possible, the use of the patient's own blood if transfusion is required has not received wide acceptance.

With respect to autologous transfusion, it is known that human bone marrow has an enormous capacity for erythropoiesis. Autologous donation takes advantage of this process by stimulating the bone marrow.

Concerns about making a preoperative patient anemic are not necessarily valid. First, most frequently performed operations do not need more than one or two units of blood. Preoperative phlebotomy of one or two units does not cause anemia in an average patient to the extent of increasing operative risk[7] (see Table 2). Second, scheduling blood donations in advance will allow bone marrow hyperplasia to compensate for the lost blood. During the month before an operation we have drawn up to five units of blood from a patient and still achieved the normal hemoglobin level before the operation. This is a classic response in a healthy donor, and is in accordance with Mollison's[96] experience with weekly phlebotomized subjects. This capacity, however, is limited in cases of bone marrow involvement and in anemias of chronic disease.

A major cause of the failure of autologous transfusion programs is claimed to be physician's apathy.[5,97] Partic-

ipation of physicians is the key issue. The program cannot succeed unless physicians are convinced that autologous blood is a superior product and serves their patients best. However, asking physicians to cooperate with the autologous program imposes a burden on their routine office function. Establishing a standing order by an office secretary for the number of homologous blood units for each type of operation is much easier than discussing the subject with the patient and making arrangements with the blood bank, and so forth. If the blood bank is seeking to overcome the doctor's apathy, it should be prepared to share this burden.

Patients are at risk of contracting AIDS from even a single blood transfusion,[98] and any responsible physician, including a blood bank physician, has an obligation to divert this risk if at all possible.

With an almost zero budget it was possible to increase the proportion of autologous transfusion to 22.6 percent in a small community hospital. There have been no known side effects. In 1982 (the last available statistics), our blood bank with its satellite drew 65.1 percent of all autologous blood among 35 hospitals in the State of Maryland. This reflects underuse of the safest source of blood in this state and probably in the nation. Effective marketing strategies to increase this share are very much desired.

We had a single goal in promoting autologous transfusion, *Primum non nocere* (first do no harm), all other advantages are considered incidental. If the statistics are valid, we have prevented numerous cases of posttransfusion hepatitis. This is the best reward.

Not only in common practice but also in medical literature the role of autologous transfusion is very much ignored. Wick *et al.*[40] reviewed various proposals for the prevention of posttransfusion Non-A, Non-B hepatitis, and concluded that "one is left with a disturbing sense of inadequacy in approaching the prevention of NANBH associated with blood transfusion." It is Eckert's[99] opinion that the quality of blood is now lower than necessary. I believe that autologous transfusions provide the ultimate solution for many transfusion recipients albeit, regrettably, not for all.

References

1. Eckardt, J.J.; Gossett, T.C.; and Amstutz, H.C. "Autologous Transfusion and Total Hip Arthroplasty." *Clin Orthop* 132(1978):39–45.

2. Marmor, L.; Berkus, D.; Robertson, J.D.; Willson, J.; Meeske, K.A. "Banked Autologous Blood in Total Hip Replacement." *Surg Gynecol Obstet* 145(1977):63–64.

3. Ploem, J.E. and Bloem, J.A.A.M. "Compensation for Blood Loss in Plastic Surgery with Ferastral and Autologous Blood Transfusion." *Scand J Haematol* Suppl. 32(1977):298–302.

4. Mann, M.; Sacks, H.J.; and Goldfinger, D. "Safety of Autologous Blood Donation Prior to Elective Surgery for a Variety of Potentially 'High-Risk' Patients." *Transfusion* 23(1983):229–32.

5. Fleming, A.W.; Green, D.C.; Radcliffe, J.K.; St. James, D.M.; and Fleming, E.W. "Development of a Practical Autologous Blood Transfusion Program." *Am Surg* 43(1977):794–801.

6. Lubin, J.; Greenberg, J.J.; Yahr, W.Z.; Haynes, J.L.; and Paul, E. "The Use of Autologous Blood in Open-heart Surgery." *Transfusion* 14(1974):602–607.

7. Zuck, T.F. "Donor Response to Predeposit Autologous Transfusion Phlebotomy." In: Dawson, R.B. ed. *Autologous Transfusion, A Technical Work-Shop.* American Association of Blood Banks, 1976, pp. 51–66.

8. Paxon, C.L., Jr. "Collection and Use of Autologous Fetal Blood." *Am J Obstet Gynecol* 134(1979):708–10.

9. Brandes, J.M.; Roth, E.F., Jr; Berk, P.D.; *et al.* "Collection and Preservation of Human Placental Blood." *Transfusion* 23(1983):325–27.

10. Schmidt, P.J. ed. and comp. *Standards for Blood Banks and Transfusion Services.* 11th ed. American Association of Blood Banks, 1985.

11. Dawson, R.B. ed. *Autologous Transfusion: A Technical Manual.* New York: Elsevier/North-Holland, 1981.

12. Sandler, S.G. and Silvergleid, A.J., eds. *Autologous Transfusion.* American Association of Blood Banks, 1983.

13. Hauer, J.M.; Thurer, R.L.; Dawson, R.B. eds. *Autotransfusion.* New York: Elsevier/North-Holland, 1980.

14. Emminizer, S.; Klopp, E.H.; and Hauer, J. "Autotransfusion: Current Status." *Heart Lung* 10(1981):83–87.

15. American Association of Blood Banks, *News Briefs* 7(43)(1984):1.

16. Kuban, D.J. In: Dawson R.B., ed. "Autologous Transfusion, A Technical Workshop." American Association of Blood Banks, 1976, pp. 3–25.

17. Papaevangelou, G.; Frösner, G.; Economidou, J.; Parcha, S.; and Roumeliotou, A. "Prevalence of Hepatitis A and B Infections in Multiple Transfused Thalassaemic Patients." *Br Med J* 1(1978):689–91.

18. Noble, R.C.; Kane, M.A.; Reeves, S.A.; and Roeckel, I. "Post Transfusion Hepatitis A in a Neonatal Intensive Care Unit." *JAMA* 252(1984):2711–15.

19. *MMWR:* Recommendations for protection against viral hepatitis. Center for Disease Control, 1985, 34(22).

20. Aach, R.D. and Kahn, R.A. "Post Transfusion-Hepatitis: Current Perspectives." *Ann Intern Med* 92(1980):539–46.

21. Aach, R.D.; Lander, J.J.; Sherman, L.A.; *et al.* "Transfusion Transmitted Viruses: Interim Analysis of Hepatitis Among Transfused and Non-transfused Patients." In: Vyas, G.H.; Cohen, S.N.; and Schmid, R. eds. *Viral Hepatitis.* Philadelphia: The Franklin Press, 1978, pp. 383–96.

22. Alter, H.J. "How Frequent is Post-transfusion Hepatitis after the Introduction of Third Generation Donor Screening for Hepatitis B." *Vox Sang* 32(1977):346.

23. Nath, N.; Pielech, M.; and Dodd, R.Y. "Hepatitis-Associated Markers in the American Red Cross Blood Donor Population." *Vox Sang* 44(1983):312–18.

24. Rosina, F.; Saracco, G.; and Rizzetto, M. "Risk of Post-Transfusion Infection with Hepatitis Delta Virus." *N Engl J Med* 312(1985):1488–91.

25. Perkins, H.A. "Summary of Reports Presented at the 16th Congress of the International Society of Blood Transfusion, Montreal 1980." *Vox Sang* 40(1981):295–302.

26. Tabor, E.; Snoy, P.; Jackson, D.R.; Schaff, Z.; Blatt, P.M.; and Gerety, R.J. "Additional Evidence of More than One Agent of Human Non-A, Non-B Hepatitis." *Transfusion* 24(1984):224–30.

27. Feinstone, S.M. and Hoofnagle, J.H. "Non-A, May be Non-B Hepatitis." *N Engl J Med* 311(1984):185–88.

28. Dienstag, J.L. "Non-A, Non-B Hepatitis. Recognition Epidemiology and Clinical Features." *Gastroenterology* 85(1983):439–62.

29. Aach, R.D.; Szmuness, W.; Mosley, M.V.; Hollinger, F.B.; Kahn, R.A.; and Stevens, C.E. "Serum Alanine Aminotransferase of Donors in Relation to the Risk of Non-A, Non-B Hepatitis in Recipient—the Transfusion Transmitted Virus Study." *N Engl J Med* 304(1981):989–94.

30. Seeff, L.B.; Wright, E.C.; Zimmerman, H.J.; *et al.* "Post-Transfusion Hepatitis, 1973–1975: a Veterans Administration Cooperative Study in Viral Hepatitis." In: Vyas, G.N.; Cohen, S.N.; Schmid, R. eds. *Viral Hepatitis.* The Philadelphia Franklin Institute Press, 1978, pp. 371–81.

31. Krugman, S. and Gocke, D.J. "Viral Hepatitis in Major Problems in Internal Medicine." Smith, L.H., Jr, ed. Philadelphia: W.B. Saunders Co., 1978, p. 87.

32. Czaja, A.J. and David, G.L. "Hepatitis Non-A, Non-B Manifestations and Implications of Acute and Chronic Disease." *Mayo Clin Proc* 57(1982):642–52.

33. Knodell, R.G.; Conrad, M.E.; and Ishak, K.G. "Development of Chronic Liver Disease after Acute Non-A, Non-B Post-Transfusion Hepatitis." *Gastroenterology* 72(1977):902–909.

34. Berman, M.; Alter, H.J.; Ishak, K.G.; Purcell, R.H.; and Jones, E.A. "The Chronic Sequelae of Non-A, Non-B Hepatitis." *Ann Intern Med* 91(1979):1–6.

35. Alter, H.J.; Purcell, R.H.; Feinstone, S.M.; and Tegtmeier, G.E. "Non-A, Non-B Hepatitis: Its Relationship to Cytomegalovirus, to Chronic Hepatitis and to Direct and Indirect Test Methods." In: Szmuness, W.; Alter, H.J.; and Maynard, J.E., eds. Viral Hepatitis 1981 International Symposium. The Philadelphia Franklin Institute Press, 1981, pp. 279–94.

36. Sherlock, S. "Overview of Chronic Hepatitis. Chronic Hepatitis and Primary Biliary Cirrhosis." *Am Assoc for Study of Liver Disease*, 1982 (Oct–Nov), p. 128.

37. Hornbrook, M.D.; Dodd, R.Y.; Jacobs, P.; Friedman, L.I.; and Sherman, K.E. "Reducing the Incidence of Non-A, Non-B Post-Transfusion Hepatitis by Testing Donor Blood for Alanine Aminotransferase." *N Engl J Med* 307(1982):1315–21.

38. Kiyosawa, K.; Akahane, Y.; Nagata, A.T.; Koike, Y.; and Furuta, S. "The Significance of Blood Transfusion in Non-A, Non-B Chronic Liver Disease in Japan." *Vox Sang* 43(1982):45–52.

39. Seto, B.; Coleman, W.G., Jr; Iwarson, S.; and Gerety, R.J. "Detection of Reverse Transcriptase Activity in Association with the Non-A, Non-B Hepatitis Agent(s)." *Lancet* 2(1984):941–43.

40. Burk, K.H.; Oefinger, P.E.; and Dreesman, G.R. "Detection of Non-A, Non-B Hepatitis Antigen by Immunocytochemical Staining." *Proc Nat Acad Sci* 81(1984):3195–99.

41. "International Forum: Based on Your Analysis of the Benefits and Costs of Routine Donor Screening for ALT-GPT to Reduce the Incidence of Post-Transfusion Non-A, Non-B Hepatitis in Your Blood Service Region, What Action Would You Recommend on This Matter?" *Vox Sang* 44(1983):48–64.

42. Wick, M.R.; Moore, S.; and Taswell, H.F. "Non-A, Non-B Hepatitis Associated with Blood Transfusion." *Transfusion* 25(1985):93–101.

43. Sampliner, R.E.; Beluk, D.; Harrow, E.J.; and Rivers, S. "The Persistence and Significance of Elevated Alanine Aminotransferase Levels in Blood Donors." *Transfusion* 25(1985):102–104.

44. Bove, J.R., Chairman. "Special Report: Report of the ad hoc Committee on ALT Testing." *Transfusion* 22(1982):4.

45. Suggs, U.; Erhardt, S.; Margenroth, T.; and Flehmig, B. "Is the Use of the Term Post-Transfusion Hepatitis Type B in its Controversial Sense Still Justifiable." *Vox Sang* 44(1983):305–11.

46. Baraldini, M.; Miglio, F.; Pirillo, L.; Cursaro, C.; Meliconi, R.; Stefanini, G.F.; *et al.*" Hepatitis B Virus Markers in Hematologic Patients: Relations to Transfusion Treatment and Hospitalization." *Vox Sang* 45(1983):112–20.

47. Aach, R.D.; Lander, J.J.; Sherman, L.A.; *et al.* "Transfusion Transmitted Virus Interim Analysis of Hepatitis among Transfused and Non-transfused Patients." In: Vyas, G.N.; Cohen, S.N.; and Schmid, R., eds. *Viral Hepatitis.* The Philadelphia Franklin Institute Press, 1978, pp. 383–96.

48. Schüpbach, J.; Popovic, M.; Gilden, R.V.; Gonda, M.A.; Sarngadharan, M.G.; and Gallo, R.C. "Frequent Detection and Isolation of Cytopathic Retroviruses (HTLV-III) from Patients with AIDS and at High Risk for AIDS." *Science* 224(1984):500–502.

49. Sarngadharan, M.G.; Popovic, M.; Bruch, L.; and Gallo, R.C. "Antibodies Reactive with Human-T Lymphocyte Retrovirus (HTLV-III) in the Serum of Patients with AIDS." *Science* 224(1984):506–508.

50. Broder, S. and Gallo, R.C. "A Pathogenic Retrovirus (HTLV-III) Linked to AIDS." *N Engl J Med* 311(1984):1292–97.

51. Curran, J.W.; Lawrence, D.N.; Jaffe, H.; Kaplan, J.E.; Zyla, L.D.; Chamberland, M.; *et al.* "Acquired Immunodeficiency Syndrome (AIDS) Associated with Transfusion." *N Engl J Med* 310(1984):69–75.

52. Scott, G.B.; Buck, B.E.; Letterman, J.G.; Bloom, F.L.; and Parks, W.P. "Acquired Immune Deficiency Syndrome in Infants." *N Engl J Med* 310(1984):76–81.

53. Wykoff, R.F.; Pearl, E.R.; and Saulsbury, F.T. "Immunologic Dysfunction in Infants Infected through Transfusion with HTLV-III." *N Engl J Med* 312(1985):294.

54. Feorino, P.M.; Jaffe, H.W.; Palmer, E.; Peterman, T.A.; Francis, D.P.; Kalyanaraman, V.S.; *et al.* "Transfusion-association Acquired Immune Deficiency Syndrome, Evidence for Persistent Infection in Blood Donors." *N Engl J Med* 312(1985):1293–96.

55. Center for Disease Control. "Prevention of Acquired Immune Deficiency Syndrome (AIDS): Report of Inter-agency Recommendations." *MMWR* 32(1983):101–103.

56. Center for Disease Control. "Provisional Public Health Service Inter-agency Recommendations for Screening Donated Blood and Plasma for Antibody to the Virus Causing Acquired Immune Deficiency Syndrome." *MMWR* 34(1985):1–5.

57. Pindyck, J.; Waldman, A.; Zang, E.; Oleszko, W.; Lowy, M.; and Bianco, A. "Measures to Decrease the Risk of AIDS Transmission by Blood Transfusion." *Transfusion* 25(1985):3.

58. Bove, J.R. "The Response to AIDS." *Transfusion* 25(1985):1–2.

59. Center for Disease Control. "Update: Acquired Immune Deficiency Syndrome-United States." *MMWR* 35(1985):245.

60. Perkins, H.A. and Janda, W.M. "Does Antibody Screening of Donors Increase the Risk of Transfusion Associated AIDS?" Letter to the Editor. *N Engl J Med* 313(1985):115–16.

61. Goedert, J.J. "Blood Donation by Persons at High Risk for AIDS." Letter to the Editor. *N Engl J Med* 312(1985):1190.

62. Petricciani, J.C.; Seto, B.; Wells, M.; Quinnan, G.; McDougal, J.S.; and Bodner, A.J. "An Analysis of Serum Samples Positive for HTLV-III Antibodies." Letter to the Editor. *N Engl J Med* 313(1985):47–48.

63. Weiss, S.H.; Goedert, J.J.; Sarngadharan, M.G.; and Bodner, A.J.; Gallo, R.C. and Blattner, W.A.. "Screening Test for HTLV-III (AIDS Agent) Antibodies." *JAMA* 253(1985):221–25.

64. Sandler G.S. and Katz, A.J. "Impact of AIDS on Blood Services in the United States." *Vox Sang* 46(1984):1–7.

65. Quinn, T.C. "Perspectives on the Future of AIDS." *JAMA* 253(1985):247–48.

66. AIDS, Ethics, and Blood Supply: A Conference on the American Blood Commission and the Hastings Center, Institute of Society, Ethics and the Life Sciences. January 1985.

67. "Medical News: HTLV-III Testing of Donor Blood Imminent; Complex Issues Remain." *JAMA* 253(1985):173–81.

68. Landesman, S.H.; Ginzburg, H.M.; and Weiss, S.H. "The AIDS

Epidemic, Special Report." *N Engl J Med* 312(1985):521–24.

69. Osterholm, J.T.; Bowman, R.J.; Chopek, M.W.; McCullough, J.J.; Korlath, J.A.; Polesky, H.F. "Screening Donated Blood and Plasma for HTVL-III Antibody: Facing More than One Crisis?" *N Engl J Med* 312(1985):1185–89.

70. Miller, P.J.; O'Connell, J.; Leipold, A.; Wenzel, R.P. "Potential Liability for Transfusion-associated AIDS." *JAMA* 253(1985):3419–24.

71. Okochi, K.; Sato, H.; and Himuma, Y. "A Retrospective Study on Transmission of Adult T-cell Leukemia Virus by Blood Transfusion." *Vox Sang* 46(1984):245–53.

72. Solier, J.P. "Disease Transmissible by Blood Transfusion." Editorial. *Vox Sang* 47(1984):1–6.

73. Adler, S.P. "Transfusion Transmitted CMV Infections—Clinical Importance and Means of Prevention." In International Forum. *Vox Sang* 46(1984):387–414.

74. Henle, W.; Henle, G.; Scriba, M.; *et al.* "Antibody Responses to the Epstein-Barr Virus and Cytomegalovirus after Open-heart and Other Surgery." *N Engl J Med* 282(1970):1068.

75. McMonigal, K.; Horwitz, C.A.; Henle, W.; Henle, G.; Lawton, J.; and Palesky, H. "Post-Perfusion Syndrome due to Epstein-Barr Virus." *Transfusion* 23(1983):331–35.

76. Papaevangelou, G.; Economidou, J.; Roumeliotou, A.; Adrachta, D.; and Parcha, S. "Epstein-Barr Virus Infection in Polytransfused Patients with Homozygous B-thalassemia." *Vox Sang* 37(1979):305–309.

77. Papaevangelou, G.J. "Post-transfusion Hepatitis, European Prospective and Prophylaxis." *Bibl Haematologica* 46(1982):16.

78. Wells, L.. "Malaria and Blood Transfusion." *Lancet* 1(8441)(1985):1317–19.

79. Center for Disease Control. *MMWR* 32(1983):222–29.

80. Deroff, P.; Reguer, M.; Simitzis, A.M.; Boudon, A.; and Saleun, J.P. "Screening Blood Donor for Plasmodium Falciparum Malariae." *Vox Sang* 45(1983):392–96.

81. Blumberg, N.; Peck, K.; Ross, K.; and Avila, E. "Immune Response to Chronic Red Blood Cell Transfusion." *Vox Sang* 44(1983):212–17.

82. Lostumbo, M.M.; Holland, P.V.; and Schmidt, P.J. "Isoimmunization after Multiple Transfusions." *N Engl J Med* 275(1966):141–44.

83. Rosenfield, R.E. "Two Types of Delayed Hemolytic Transfusion Reactions." Letter to the Editor. *Transfusion* 25(1985):182.

84. Burrows, L. and Tartter, P. "Effect of Blood Transfusion on Colonic Malignancy Recurrence Rate." *Lancet* 2(1982):662.

85. Agarwal, M. and Blumberg, N. "Colon Cancer Patients Transfused Peri-operatively Have an Increased Incidence of Recurrence," abstract. *Transfusion* 21(1983):421.

86. Woodruff, M.F.A. and van Rood, J.J. "Possible Implications of the Effect of Blood Transfusion on Allograft Survival." *Lancet* 1(1983):1201–1202.

87. Francis, D.M.A. and Shenton, B.K. "Blood Transfusion and Tumor Growth: Evidence from Laboratory Animals." Letter to the Editor. *Lancet* 2(1981):871.

88. De Martino, M.; Rossi, M.E.; Mucciolo, A.T.; Vullo, C.; and Vierucci, A. "Altered T-cell Subsets and Function in Polytransfused Thalassemia B Patients: Correlation with Sex and Age at First Transfusion." *Vox Sang* 48(1985):296–304.

89. Economidou, J.; Constantoulakis, M.; Augoustaki, O.; Adinolfi, M. "Frequency of Antibodies to Various Antigenic Determinants in Polytransfused Patients with Homozygous Thalassemia in Greece." *Vox Sang* 20(1971):252.

90. Zimmerman, D.R. "*The Investigator* (Publisher: Jack Anderson) 1(Sept 1981):30.

91. Gilcher, R.O. "Autologous Blood Transfusion Promoted." *Am Med News* 23/30(Nov 1984):24.

92. *Great Dialogues of Plato, the Republic.* The New American Library, 1956, p. 141.

93. Daneshvar, A. Unpublished data.

94. Silverstein, M.D.; Mulley, A.G.; and Dienstag, J.L. "Should Donor Blood be Screened for Elevated Alanine Aminotransferase Levels?" *JAMA* 252(1984):2839–45.

95. Kotler, P. *Marketing Management*, 4th ed. Englewood Cliffs, NJ: Prentice-Hall, 1980, p. 162.

96. Mollison, P.L. *Blood Transfusion in Clinical Medicine*, 6th ed. Oxford: Blackwell Scientific Publications, 1979, p. 6.

97. Virgilio, L.A.; Fickes, C.L.; Haberstroh, R.E.; Deveney, L.B.; Cooper, M.J.; and Sykes, C. "Physician Apathy and Underutilization of Autologous Transfusion, Abstract." *Transfusion* 21(1981):585.

98. Maloney, M.J.; Cox, F.; Wray, B.B.; Guill, M.F.; Hagler, J.; and Williams, D. "AIDS in a Child 5-½ years after a Transfusion." Letter to the Editor. *N Engl J Med* 312(1985):1256.

99. Eckert, R.D. and Wallace, E.L. *Securing a Safer Blood Supply: Two Views.* American Enterprise Institute, Studies in Health Policy, 1985.



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Postpartum Blood Pressure Patterns in Patients with Hypertensive Complications of Pregnancy

SELMAN I. WELT MD, DAVID A. NAGEY MD, COLLETTE G. MULL, VIVIAN X. PUPKIN, and CARLYLE CRENSHAW, Jr., MD

Blood pressures were noted in 191 postpartum patients whose pregnancies were complicated by preeclampsia, chronic hypertension, chronic hypertension with superimposed preeclampsia, or eclampsia. Patients on vasoactive medications other than magnesium sulfate were excluded. Contrary to common clinical expectation, the mean arterial pressure rose with time after delivery in patients with preeclampsia and eclampsia and decreased with time postpartum in patients with chronic hypertension, with or without superimposed preeclampsia. Difficulties in using retrospective data such as these are addressed, as are the implications for clinical care.

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Improvements in blood banking, infection control, and anesthesia techniques, along with the increasing number of somewhat older women starting their families are likely reasons for the increasing importance of hypertensive disease as a complication of pregnancy and as a contributor to maternal mortality. Despite the prevalence and importance of hypertensive complications of pregnancy, relatively little work has been done to elucidate optimal clinical management schemes. Our ignorance includes the expected blood pressure patterns in both pregnancy and the postpartum state.

Although it is commonly held that the process of delivery will solve most of the cardiovascular problems of the hypertensive complications of pregnancy, anecdotal experiences indicate continued difficulties in management with regard to eclampsia, stroke, hypertensive encephalopathy, and postpartum cardiac failure.[1,2] Finnerty, in examining nonhypertensive parturients, even postulated a "pressor phenomenon" associated with the postpartum period.[3]

Because of suspicion that antepartum diagnosis-related patterns in mean arterial pressure exist,[4,5] and because of the oft taught, but never proved, supposition that postpartum blood pressures are related to primary diagnosis, and hence can be of value in deciding whether a patient has chronic hypertension or pregnancy associated hypertension, it was decided to embark upon this study. We realized and tried to overcome some of the many inherent limitations in using retrospectively collected data, and discuss these limitations in clinical use.

Materials and Methods

A total of 8,083 blood pressures were noted in 191 postpartum patients with hypertensive complications of pregnancy. These patients were delivered at Duke University Medical Center, Durham, North Carolina, between 1978 and 1981. Patients receiving any vasoactive medication after delivery other than magnesium sulfate were excluded from the study. There were 4,964 postpartum blood pressures obtained in the 98 patients with preeclampsia; 1,571 postpartum blood pressures obtained in the 58 patients with chronic hypertension; 1,322 blood pressures in the 32 patients with chronic hypertension with superimposed preeclampsia; and 226 postpartum blood pressures obtained in the 3 eclamptic patients. The criteria used in classifying patients as above, are traditional.[6,7]

Initial blood pressure sampling was begun as soon after delivery as was deemed clinically feasible and may reflect acute blood loss or medications. The position of the patients at the time of blood pressure determination was not noted. The distribution of blood pressure samples for each of the four groups as a fraction of each group's total data, is demonstrated by the hours post delivery in Figure 1.

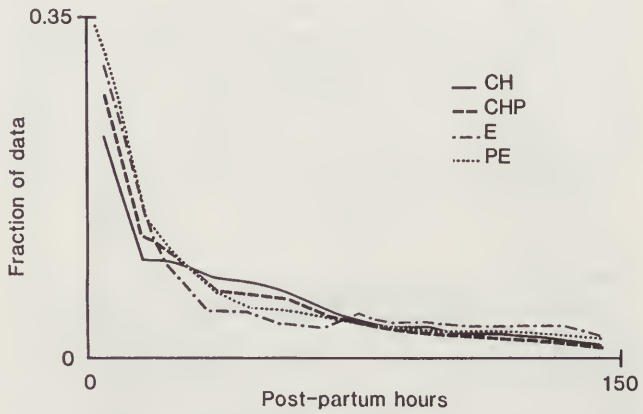


Figure 1. Distribution of data collection for each of the four patient groups as a fraction of each group's total data over time. (CH = chronic hypertension, PE = preeclampsia, CHP = chronic hypertension with superimposed preeclampsia, E = eclampsia).

For ease of statistical assessment, all blood pressure samples were converted to mean arterial pressure (MAP). The mean arterial pressure is equal to twice the diastolic blood pressure plus the systolic pressure, that sum divided by 3. (MAP is an approximation of the root mean square blood pressure.) Each mean arterial pressure was normalized by dividing it by that patient's initial mean arterial pressure. Normalized data were then analyzed by linear regression with time in hours postpartum. Significance was tested using the F-distribution. Student's t-test (2 tailed), was used to compare regression coefficients. The interested reader is referred to any standard statistical text (cf. Zar[8]).

Results

The time after delivery of the first blood pressure sample and the time after delivery of the last blood pressure sample varied little; both were subject to uncontrolled clinical assessments by the physician and the nurse caring for the patient. Times of the first blood pressure samples were 1.74 hours, 1.66 hours, 1.52 hours, and 0.6 hours for preeclampsia, chronic hypertension, chronic hypertension with superimposed preeclampsia, and eclampsia, respectively. The respective values for the final samples times were 117.7 hours, 102.7 hours, 103.3 hours, and 152.3 hours.

Initial mean arterial pressure ranged from 93.9 mm Hg for patients with uncomplicated chronic hypertension to 108.4 mm Hg for patients with eclampsia. The only statistically significant comparisons were that those patients with chronic hypertension had statistically significantly lower initial postpartum mean arterial pressure than any other patient group as judged by the t-test. The same was true 24 hours after delivery when the patients with uncomplicated chronic hypertension had a mean arterial pressure of 95.5 mm Hg contrasting with values in the other groups ranging up to 118.3 mm Hg for the eclamptic patients.

To look at trends, it was inappropriate to use all the data points weighed equally, as most patients tend to have most of their samples taken shortly after delivery (Figure 1). In addition, weighing all data points equally would give an unfair "advantage" to those patients deemed most ill. While some bias in this area would remain, it was decided to analyze the data by determining the mean arterial pressure for each hour after delivery for each patient group. These analyses are demonstrated graphically in Figure 2.

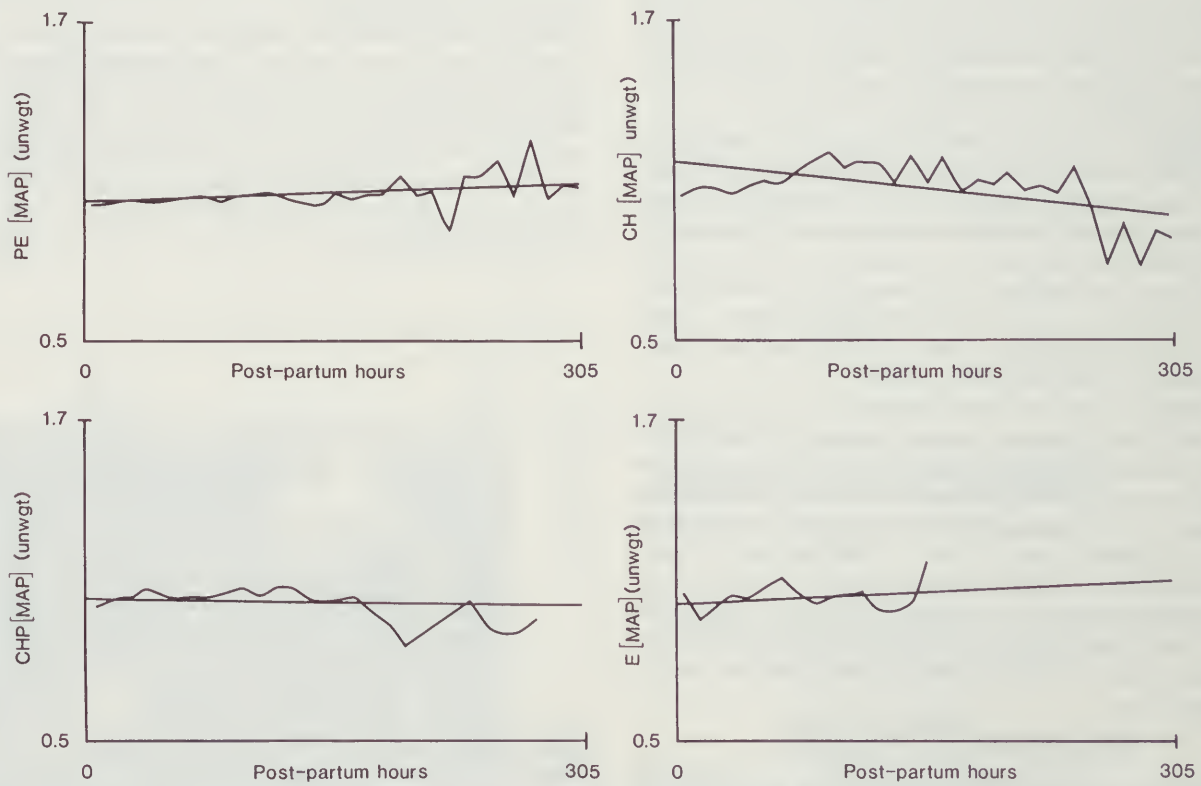


Figure 2. Unweighted (unwgt) and normalized mean arterial pressure (MAP) vs. time in the four patient groups.

Statistically significant regressions for mean arterial pressure (treated as previously described) vs time were found for all patient groups except patients with eclampsia (N = 3). In comparing slopes, patients with preeclampsia had a statistically significantly greater slope than patients with uncomplicated chronic hypertension or patients with chronic hypertension with superimposed preeclampsia. While the patients with eclampsia had statistically significantly greater slopes than patients with chronic hypertension or chronic hypertension with superimposed preeclampsia, it should be remembered that because of the small sample size, the regression for the eclamptic patients was not significant.

Discussion

Clinical care of hypertensive parturients has led us to several general discoveries:

1. Altered vascular reactivity does not return to normal immediately following delivery.
2. Significant numbers of preeclamptic and eclamptic patients can develop seizure disorders longer than 24 hours after delivery.
3. Hypertension not only may persist beyond the immediate postpartum period but also may get worse following hospital discharge.
4. Persistent hypertension in the presence of coagulopathies may present disastrous complications.

The older literature points out many of these observations. J.S. Henry,[9] in reviewing the published data on the effect of pregnancy on blood pressure pointed out "in toxaemic patients, the postpartum fall to normal is very variable, but is apt to take longer in eclamptics and in pre-eclamptics." In his review of preeclamptics, eclamptics, patients with chronic nephritis, and normal patients, he also noted that a fall in blood pressure is "expected" after a pregnancy complicated by hypertension. When such a fall did not occur, this was a significant aid in differentiating a condition that may have varied from "true pregnancy toxemia." A similar point of view was espoused by Chesley[1] whose interest was in obtaining blood pressure data remote from pregnancy in order to relate this to the patient's status during pregnancy.

The course of events during normal pregnancy appears to be a decrease in absolute blood pressure during pregnancy with a rise to nonpregnant values in the postpartum period.[10] Such is clearly not the case in the pregnancy complicated by hypertensive disease.

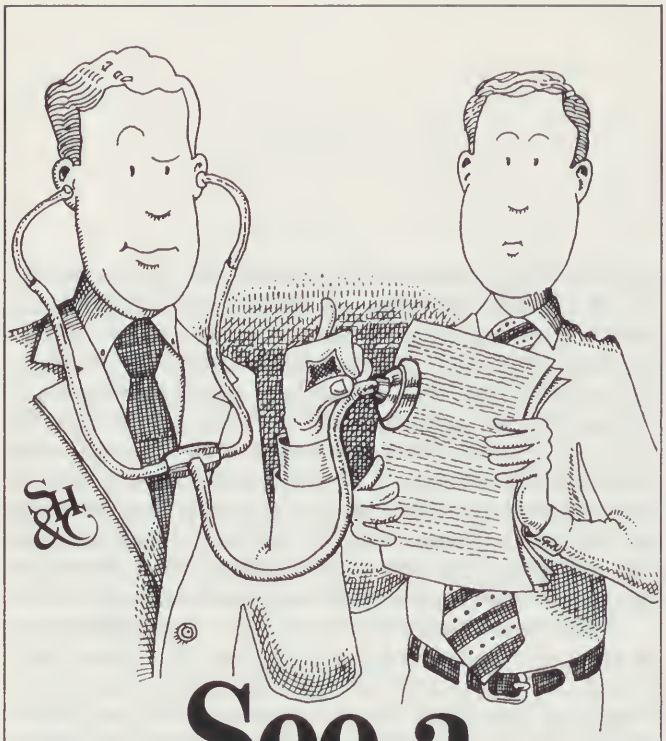
Attention should be given to some limitations of this hospital-based study, which did not follow patients beyond the thirteenth postpartum day. There is no question that the most ill patients (of those not excluded because of vasoactive medications; this is yet another contaminant) had more blood pressure recordings made than did their healthier sisters and thus had the potential for "contaminating" the data with their findings. Additionally, more care was probably taken in determining the abnormal blood pressures than in measuring those in the normal range. The only way to truly control this confounding factor would be to collect this data in a prospective fashion following the same protocol in all patients. Consideration also should be given to using an automated sphygmomanometer.

Another confounding factor is the imponderable of the peripartal events that might effect the initial postpartum blood pressure. Since all subsequent values are divided by this value to obtain the normalized mean arterial pressure, its importance is obvious. Despite these drawbacks, the data collected may contain some lessons for the clinician and, at least, should stimulate a prospective trial.

As mentioned, the slope in mean arterial pressure for patients with chronic hypertension and with chronic hypertension with superimposed preeclampsia was negative, meaning that the mean arterial pressure fell in these patients with time after delivery. This in itself is not surprising, until it is seen along with the positive slope, hence rising mean arterial pressure with time, in those patients with uncomplicated preeclampsia. However, reflection might suggest that those patients with uncomplicated preeclampsia, because of their decreased intravascular volume and decreased arterial compliance, would have been more likely to suffer from relative hypotension resulting from the normal blood loss of delivery, thus making their initial mean arterial pressures low. Inspection of the graphs suggests there was a true increase in mean arterial pressure in this group of patients. Alternatively (and we feel more appropriately), based on our clinical experience, this group of patients with uncomplicated preeclampsia undergoes a true increase in their mean arterial pressure after delivery. The implications for this in the management of the postpartum preeclamptic patient are obvious.

Conclusion

In contrast with past medical thinking, patients with uncomplicated preeclampsia experience increases in mean arterial pressure postpartum while patients with chronic hypertension, whether or not they have superimposed preeclampsia, experience declines in their mean arterial pressure after delivery. None of these puerperal changes in mean arterial pressure are of significant magnitude to be startling, however the noted trends necessitate a longer commitment to posthospi-



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talization care in the preeclamptic patient. Additionally, the difference in uncomplicated preeclampsia and preeclampsia occurring in the setting of chronic hypertension is of interest. Physiologic models of the etiology of preeclampsia must take these changes into account. Finally, the findings of this study may be seen as no more than provocative, as changes in clinical management other than altered expectations regarding puerperal blood pressure must await the performance of a prospective trial to eliminate, or at least diminish, some of the confounding factors described herein.

References

1. Chesley, L.C. and Annitto, J.E. "Pregnancy in the Patient with Hypertensive Disease." *Am J Obstet Gynecol* 53(1947):372.
2. Brockington, I.F. "Postpartum Hypertensive Heart Failure." *Am J Cardiol* 27(1971):650.
3. Finnerty, F.A., Jr.; BuchHolz, J.H.; and Guillaudeu, R.L. "A Pressor Phenomenon Associated with the Postpartum Period." *JAMA* 165(1957):778.
4. Welt, S.I. and Nagey, D.A. "Pattern Analysis of Mean Arterial Pressure in Normal and Chronically Hypertensive Pregnancies," Abstract. Society for Gynecologic Investigation, 1978.
5. Page, E.W. and Christianson, R. "Influence of Blood Pressure Changes With and Without Proteinuria upon Outcome of Pregnancy." *Am J Obstet Gynecol* 126(1976)821.
6. Welt, S.I. and Crenshaw, M.C., Jr. "Concurrent Hypertension and Pregnancy." *Clin Obstet Gynecol* 22(1978):619.
7. Hughes, E.C. (ed). *Obstetric-Gynecologic Terminology.* Philadelphia: F.A. Davis Company, 1972.
8. Zar, J.H. *Biostatistical Analysis.* Englewood Cliffs, NJ: Prentice-Hall, 1974.
9. Henry, J.S. "The Effect of Pregnancy on Blood Pressure." *J OB/GYN of Br Empire* 43(1936):908.
10. MacGillivray, I.; Rose, G.A.; and Rowe, B. "Blood Pressure Survey in Pregnancy." *Clin Sci* 37(1969):395.

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The Changing Clinical Program at Montebello: A Review of SCI Patients 1979–1984

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Spinal cord injuries (SCI) have a low incidence, approximating 35 to 50 per million.[1,2] However, the serious consequences of such injuries on individuals and society render SCI a complex clinical problem and a social issue of considerable magnitude.[1] Automobile accidents, crimes of violence, and sports injuries are major causes of SCI in the United States.

Koval, Gaudet, Beckerman, Einhorn, Knudson, and Kessler are with the Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine, as are Flynn and Maloof, who also are affiliated with Montebello Center. McCagg is at Montebello Center, Baltimore, MD.

In the past twenty years there has been a trend toward regionalization and integration of care for SCI patients. Specialized acute care facilities and rehabilitation institutions provide the environment necessary for maximal recovery.

Established in 1957 Montebello Center (MBC) evolved into a facility for long-term care of chronically ill patients that included a smaller Rehabilitation Program. The pattern changed in 1976 when the clinical services at Montebello affiliated with the University of Maryland at Baltimore and evolved into a more formal rehabilitation program for patients with traumatic and/or disease-related disabilities. The hospital is now accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF).

A spinal cord injury program with formal admissions criteria and a separate therapy nursing and physician staff was organized in 1979. For logistical reasons not all patients in the hospital with SCI were admitted to the service. At present, a further transition in patient care has insured that SCI patients only are admitted to this specialized program. The results of these changes will constitute the basis of an additional report.

We present the results of a review of patients admitted to the Montebello Center since 1979, when a formal SCI unit was initiated. The demographic, epidemiological, and clinical characteristics of the patients were analyzed in respect to length of stay and clinical outcome. In addition, the patient population was compared to national data (as reported by the American Spinal Injury Foundation) in order to better characterize the study population.

Materials and Methods

The hospital records of 288 patients admitted for rehabilitation after spinal cord damage were abstracted. Eligibility for study required the patient to have been discharged from Montebello between January 1, 1979 and June 30, 1984. Analysis was restricted to patients admitted for their initial posttrauma rehabilitation. Those who had been treated previously in a rehabilitation hospital or whose first admission was before 1979 were ineligible. All traumatic causes of SCI were included unless there was other significant damage to the central nervous system. On this basis, 29 patients with significant head trauma were excluded. Spinal cord lesions in patients with an insidious onset or relapsing course also were excluded.

An abstracting form was developed to collect the requisite information. This included demographic data, extrinsic causes of injury, neurological level of injury, functional ability, complicating conditions, discharge plans, and complications occurring during hospitalization at Montebello Center. Urinary tract infections were recorded if mentioned in the chart or if any urinalysis reported more than 100,000 organisms/ml. Anemia was defined on the basis of less than 14 mg/dl hemoglobin in males or 12 mg/dl in females. If requisite information could not be secured by chart or record, an "unknown" code was entered.

Activities of daily living, when available, were recorded according to the Barthel Index, which is based on 11 distinct activities such as feeding, bathing, and mobility. These were extracted from the charts as graded by a physical or occupational therapist. To adjust for missing information, an index was developed in which patients were scored according to number of activities they could perform independently divided by the total number of activities recorded in the chart. The index, therefore, had values ranging from 0 to 11.

After the abstracted data were coded, the information was verified. A Statistical Analysis System (SAS) was employed for the analysis. Cross-tabulations of categorical data, scattergrams, and mean values of continuous variables were used. Multiple linear regression was also employed to assess the effect of various factors on the length of hospitalization.

Results

A review of the charts of the 288 eligible SCI patients revealed the majority were male (79.5 percent). The extrinsic causes of injury by sex are presented in Table 1, next page. The most common cause overall, but particularly in males, was gunshot wounds. Other common causes in males were falls/jumps, medical/surgical,

Table 1. SCI Cause, by Sex*

Cause	Male	Female	Total
Gunshot	60 (26.2)	8 (13.6)	68 (23.6)
Falls/jumps	47 (20.5)	10 (17.0)	57 (19.8)
Medical/surgical	36 (15.7)	18 (30.5)	54 (18.8)
Automobile	33 (14.4)	18 (30.5)	51 (17.7)
Diving	20 (8.7)	2 (3.4)	22 (7.6)
Motorcycle	12 (5.2)	0	12 (4.2)
Bicycle/pedestrian	6 (2.7)	0	6 (2.0)
Other	15 (6.6)	3 (5.1)	18 (6.3)
Total	229 (100.0)	59 (100.0)	288 (100.0)

* Percentages in parentheses

Table 2. Cause by Level of Cord Injury*

Cause	Level†			
	Cervical	Thoracic	Lumbar/ Sacral	Total
Gunshot	15 (22.1)	37 (54.4)	16 (23.5)	68 (100.0)
Falls/jumps	31 (58.5)	14 (26.4)	8 (15.1)	53 (100.0)
Medical/surgical	20 (39.2)	25 (49.0)	6 (11.8)	51 (100.0)
Automobile	24 (49.0)	21 (42.9)	4 (8.2)	49 (100.0)
Diving	21 (95.5)	1 (4.5)	0	22 (100.0)
Motorcycle	4 (33.3)	8 (66.7)	0	12 (100.0)
Bicycle/pedestrian	5 (83.3)	1 (16.7)	0	6 (100.0)
Other	9 (56.3)	6 (37.5)	1 (6.3)	16 (100.0)
Total	129 (46.6)	113 (40.8)	35 (12.6)	277 (100.0)

* Excludes 11 injuries in which level of injury was unknown
† Percentages in parentheses

Table 3. SCI Cause, by Race*

Cause	Black	Caucasians and Others†
Gunshot	54 (36.5)	14 (10.0)
Falls/jumps	35 (23.7)	22 (15.7)
Medical/surgical	24 (16.2)	30 (21.4)
Automobile	16 (10.8)	35 (25.0)
Diving	3 (2.0)	19 (13.6)
Motorcycle	3 (2.0)	9 (6.4)
Bicycle/pedestrian	4 (2.8)	2 (1.4)
Other	9 (6.1)	9 (6.4)
Total	148 (100.0)	140 (100.0)

* Percentages in parentheses
† Including 4 percent who were Orientals and Latinos

and automobile accidents. The pattern for female patients was different in that there were relatively more automobile and medical/surgical traumas and fewer gunshot wounds. The medical/surgical etiology category included 54 patients with spinal cord injuries resulting from a variety of procedures and conditions. Included were 13 SCIs associated with cancer, nine metastatic and four primary. Infections or inflammatory processes accounted for another 13, including 3 with spondylitis and 2 each with Guillain-Barré syndrome, tuberculosis, and transverse myelitis. Spondylosis, spinal cord stenosis, and disc herniation accounted for 10 SCIs, and arthritic dislocation for 2. Aortic aneurysm, or complications of reparative surgery, was reported in 7 SCIs, and another 4 were attributed to cord infarction. The "other" category included flying or falling objects, 5; knife wounds, 3; and sports injuries, 3.

Distribution of injuries by cause and level of spinal cord involvement is presented in Table 2. The cervical cord was the characteristic site of injury in diving accidents, falls, and pedestrian/bicycle injuries. Gunshot wounds, motorcycle injuries, and medical/surgical trauma more commonly involved the thoracic cord. Most of the lumbar or sacral spine injuries were caused by gunshots and falls or jumps. It should be noted that the majority of SCIs were defined as "incomplete," that is, resulting in less than total loss of sensation and function below the affected segment. This was true for 62 percent of the cervical spine lesions and 60 percent of the thoracic and lumbar lesions. The "incomplete" category included 27 central cord lesions, 8 Brown-Séquard syndromes, and 8 cauda equina syndromes.

Causes of injury varied substantially according to race (Table 3). Black patients (51 percent of the total population) had relatively higher frequencies of gunshot wounds, falls, medical/surgical trauma, and automobile accidents. Caucasian patients (47 percent of the total) experienced relatively higher frequency of automobile accidents, medical/surgical trauma, falls, diving injuries, and gunshot wounds.

The relationship between age and cause of injury is shown in Table 4, next page. In the predominant age group, 15 to 29 years, the most frequent causes were gunshot, automobile, and diving accidents. Medical or surgical causes, falls, and jumps were prevalent in the older patients.

Data on marital status, living conditions, occupation, and education were collected. At the time of injury, 25 percent of the patients were married, 20 percent were divorced, or separated and 39 percent had never married. Fifty-six percent had less than a high school education: among these were 68.3 percent of the gun-

shot victims, 60.5 percent of the falls/jumps, and 48.7 percent of the auto accidents. Of patients whose occupational status was known, 129 (49.4 percent) were employed and 35 (13 percent) were retired or listed as housewife. Unemployed persons composed 29.1 percent of the total population but accounted for 47.7 percent of gunshot injuries and 33 percent of falls/jumps. They represented 16.7 percent of the auto accident SCIs.

Maryland was listed as the state of residence for 95 percent of the patients studied. Five patients were from Washington, DC, two from Pennsylvania, and one each from West Virginia and Delaware. Forty-eight percent of the patients were Baltimore City residents, 9 percent from Prince Georges County, 8 percent from Anne Arundel County, and 8 percent from Baltimore County. The distribution of injuries by cause varied according to county of residence. For example, 66 percent of gunshot wounds but only 24 percent of automobile accidents were attributed to Baltimore City; in the more rural counties, automobile accidents accounted for a greater percentage of the SCIs (Table 5).

The patient's chart often contained references to the use of alcohol or illegal drugs at the time of injury. The use of these substances was mentioned in 15 (26.3 percent) of falls/jumps; 11 (21.6 percent) automobile accidents; 4 (18.2 percent) of diving accidents, and 6 (8.8 percent) of gunshot wounds. A previous history of alcoholism or drug dependency was noted in 19 (37.3 percent) of auto accidents and 31 (45.6 percent) of gunshot cases. A history of alcoholism was noted in almost half (27 of 57) of the SCIs due to falls or jumps.

Data on surgical procedures performed prior to MBC hospitalization by level of cord injury were tabulated. Orthopedic procedures were performed on no fewer than 203 (71 percent) of the patients who underwent at least one procedure. These were relatively more frequent in patients with injuries to the cervical cord, 83.7 percent (108) of whom had an orthopedic procedure. By way of contrast, 62.8 percent (71) of thoracic and 68.6 percent (24) of lumbosacral patients underwent orthopedic procedures. Tracheostomies and skin or flap grafts were more common in cervical cord patients, while cardiothoracic procedures and laparotomies predominated in thoracic injuries. After referral to MBC, an additional 62 orthopedic procedures, 5 skin grafts, and 2 laparotomies were performed, many as follow-up procedures.

The following complications were noted: urinary

Table 4. SCI Cause, by Age Group*

Cause	Age Group (years)				
	0–14	15–29	30–44	45–59	60+
Gunshot	0	45 (36.6)	19 (28.4)	7 (6.9)	0
Falls/jumps	1 (100.0)	9 (7.3)	14 (20.9)	20 (34.5)	13 (33.3)
Medical/surgical	0	8 (6.5)	8 (11.9)	20 (34.5)	18 (46.2)
Automobile	0	24 (19.5)	13 (19.4)	10 (17.2)	4 (10.3)
Diving	0	21 (17.1)	1 (1.5)	0	0
Motorcycle	0	8 (6.5)	3 (4.5)	0	1 (2.6)
Bicycle/pedestrian	0	3 (2.4)	1 (1.5)	2 (3.4)	0
Other	0	5 (4.1)	8 (11.9)	2 (3.4)	3 (7.7)
Totals	1 (100.0)	123 (100.0)	67 (100.0)	58 (100.0)	39 (100.0)

* Percentages in parentheses

Table 5. SCI Cause, by County of Residence*

Cause	Baltimore City	Baltimore County	Prince George's County	Other	Total
Gunshot	45 (66.2)	5 (7.4)	8 (11.8)	10 (14.7)	68 (100.0)
Falls/jumps	30 (52.6)	6 (10.5)	5 (8.8)	16 (28.1)	57 (100.0)
Medical/surgical	26 (48.1)	6 (11.1)	2 (3.7)	20 (37.0)	54 (100.0)
Automobile	12 (23.5)	2 (3.9)	6 (11.8)	31 (60.8)	51 (100.0)
Other	24 (41.4)	4 (6.9)	5 (8.6)	25 (43.1)	58 (100.0)
Totals	137 (47.6)	23 (8.0)	26 (9.0)	102 (35.4)	288 (100.0)

* Percentages in parentheses

tract infections (59 percent), integument (32 percent), anemia (24 percent), heterotrophic ossification (8.3 percent), phlebitis (4.2 percent), septicemia (3.5 percent), and reflex sympathetic dystrophy (3.1 percent) (Table 6).

Frequency of complications varied according to the patient's length of stay (Table 7). Patients hospitalized for 6 months or more were likely to experience 3 or more complications, while those confined for shorter durations had substantially fewer complications on the average. Ninety patients (31 percent) had intravenous pyelography, 59 (20 percent) had a cystometrogram, and 39 (14 percent) had cystography. Cystoscopy and electromyelograms were each performed in 11 patients and myelography in 7 patients.

Patients with complete spinal cord injuries (that is, associated with total loss of function and sensation) clearly were less able to perform a variety of functions of daily living, both at time of admission and discharge than were patients with incomplete injury (Table 8). Substantially less than half the completely injured cervical spine patients could perform any of the listed functions at discharge. Those with thoracic and lumbar injuries could perform more functions, although fewer than 40 percent could walk or climb stairs. As expected, patients with more incomplete injuries exhibited greater functional capacity at discharge.

Several factors contributed to length of stay, however, and these were assessed by means of a multiple regression technique. The variables age, sex, race, level and status of injury, cause, county of residence, functional ability, hospital insurance, and bowel or bladder function were included in the model. Level of injury and completeness were general indicators of length of stay (Table 9, next page). After a stepwise regression, only five variables were found to be significantly associated with length of stay. These were: source of payment, decubiti, automobile trauma, bladder continence, and activities of daily living.

Review of discharge plans indicated 227 (78 percent) were discharged to their own homes, boarding homes, or the homes of relatives. Twenty-six patients (10 percent) were discharged to nursing homes or other chronic care facilities. Eleven were transferred to acute care facilities because of medical complications and another six were transferred to vocational institutions. Twelve

Table 6. Complications Identified

Complication	Number	Percent
Urinary tract infection	169	58.6
Integument	93	32.3
Anemia	70	24.3
Heterotropic ossification	24	8.3
Phlebitis	12	4.2
Septicemia	10	3.5
Reflex sympathetic dystrophy	9	3.1
Urinary calculi	5	1.7

Table 7. Complications, by Length of Stay*

Length of Stay (Months)	0	1 or 2	3 or more	Total
0–3	33 (21.6)	86 (56.2)	34 (22.2)	153 (100.0)
3–6	8 (9.1)	42 (47.7)	38 (43.2)	88 (100.0)
6+	1 (2.1)	11 (23.4)	35 (74.5)	47 (100.0)
Total	42 (14.6)	139 (48.3)	107 (37.2)	288 (100.0)

* Percentages in parentheses

Table 8. Functional Ability* by Cord Level of Injury and Severity at Admission and Discharge

Function	Cervical		Other†		Cervical		Other†	
	Comp.‡	Inc.	Comp.‡	Inc.	Comp.‡	Inc.	Comp.‡	Inc.
Feeding	32	54	98	86	59	80	100	95
Wheel chair to bed	8	31	18	49	43	70	93	93
Personal toilet	15	36	74	54	32	63	85	73
Wheel chair to toilet	4	16	6	34	24	60	68	80
Bathe	4	16	10	20	21	44	54	63
Walk on level	0	19	15	18	11	56	24	51
Propel wheel chair	18	33	62	47	42	60	70	72
Climb stairs	0	11	0	5	4	37	20	37
Dress	2	24	25	43	30	50	76	79
Bowel continence	2	43	9	38	16	58	41	72
Bladder continence	4	41	9	43	20	60	53	81
Mean ability	8.1	29.5	29.6	39.7	27.5	58	62.2	72

* Percentage of patients able to perform function independently
† Thoracic, lumbar, or sacral
‡ Complete or incomplete neurological injury

patients (4 percent) died.

The method of urinary management employed after discharge from Montebello Center is shown in Table 10. Patients with cervical and thoracic injuries were more likely to be discharged with intermittent catheterization, while lumbosacral trauma cases tended either to require the same form of management or to urinate normally.

Following discharge, 198 patients (76 percent) received outpatient medical services, 52 (20 percent) completed their physical therapy, and 31 (12 percent) received occupational therapy in an outpatient setting. The use of home health aides or home nursing was noted in 7 percent of discharges.

The source of payment was as follows: Medicaid (42 percent), other third party (31 percent), and the remainder assigned to Medicare or workman's compensation. Twenty-eight patients had Medicaid or Medicare claims pending at the time of the discharge. (This may reflect the major use of resources during the acute phase of management.)

Discussion

Statistics concerning traumatic spinal cord injury are systematically collected by the National Spinal Cord Injury Data Research Center (NSCIDRC).[1] A direct comparison of Montebello patients with the NSCIDRC data is impractical because of differences in definition of SCI and in the periods studied. However, the Montebello SCI patients have distinct characteristics that contrast with those in the national data set. Forty-seven percent of national SCI are attributed to vehicular accidents, while only 24 percent of Montebello SCIs are so designated. On the other hand, penetrating wounds such as gunshots were substantially more prevalent at Montebello (23.6 percent versus 13 percent).

Diagnostic testing of the urinary tract is an important component of hospitalization for SCI victims. This is deemed necessary for avoiding complications of long-term urinary dysfunction, such as reflux and hydronephrosis.[4,5] Urinary tract infections (59 percent) and problems with the integument (32 percent) were noted in Montebello patients, compared to 68 percent and 22 percent reported in the national data.[3] Anemia was more prevalent in Montebello patients, 24 percent versus 11 percent nationally. This is probably due to differences in the definition of this complication in the two studies.

Another recent trend in management of SCI involves the use of surgical stabilization procedures.[6] Young[1] reported that 78 percent of SCI patients underwent some type of spinal surgery. In comparison, reference to surgical stabilization procedures was found in 53 percent of Montebello patients, while an additional 18 percent underwent orthotic stabilization.

Results of the multivariate analysis of length of stay were surprising in that variables such as cord level of injury did not prove to be significant. The variability due to small numbers of patients may be, at least in part, responsible. One can understand how a low ADL index, bladder incontinence, decubiti, or serious automotive accident could prolong hospitalization. The effect of payment for services by medicare or medicaid is less apparent but may be due to secondary associations with age, socioeconomic status, or other factors. More of the variation in length of stay could be explained by adding variables identified later in the hospital stay, but these do not predict length of stay any more precisely.

This study did not focus on the cost of rehabilitation

Table 9. Length of Stay (Days) by Cord Level and Severity

	Cervical		Thoracic		Lumbar/Sacral	
	Comp.	Inc.	Comp.	Inc.	Comp.	Inc.
Mean	123	198	87	109	69	112
SD	124	232	69	131	45	96
N	77	52	62	51	29	6

Table 10. Urinary Tract Management by Cord Level*

	Cervical	Thoracic	Lumbar/Sacral	Total
Indwelling catheter	15 (13.0)	8 (8.5)	0	23 (9.2)
Intermittent catheter	44 (38.3)	59 (55.3)	14 (45.2)	117 (47.0)
Catheter free with collector	23 (20.0)	9 (8.7)	0	32 (12.9)
Normal micturition	33 (28.7)	27 (26.2)	17 (54.8)	77 (30.9)
Totals	115 (100.0)	103 (100.0)	31 (100.0)	249 (100.0)

* Percentages in parentheses

† Excludes 39 patients whose urinary management data was deficient

at Montebello Center. Such costs are undoubtedly considerable. With a daily bed charge of approximately $275 during the study period, an average stay of 122.9 days would cost $33,798. This suggests the economic burden that must be managed by either the patient or the taxpayer.

References

1. Young, J.S.; Burn, P.E.; Bowen, A.M.: *et al.* "Spinal Cord Injury Statistics; Experience of the Regional Spinal Cord Injury System." Phoenix: Good Samaritan Medical Center, 1982.
2. Kraus, J.E. "Incidence of Traumatic Spinal Cord Lesions" *J Chronic Dis* 28(1975):471–92.
3. Woolsey, R.M. "Rehabilitative Outcome Following Spinal Cord Injury" *Arch Neurol* 42(1985):116–19.
4. Graham, S.D. "Present Urological Treatment of Spinal Cord Injured Patients." *J Urol* 126(1981):1–4.
5. Nanninga, J.B.; Wu, Y.; and Hamilton, B. "Long Term Intermittent Catheterization in the Spinal Cord Injured Patient." *J Urol* 128(1982):760–63.
6. Ahn, J.H.; Ragnarsson, K.T.; Gordon, W.A.; Goldfinger, G.; and Lewin, H.M. "Current Trends in Stabilization of High Thoracic and Thoracolumbar Spinal Fractures." *Arch Phys Med Rehabil* 65(1984):366–68.

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Sarcoidosis: Diagnosis by Iris Biopsy

DAVID C. DONOVAN MD and JOSEPH B. AQUILLA MD

The diagnosis of sarcoidosis with ocular involvement is often difficult and accompanied by a measure of uncertainty due to a paucity of additional physical signs. We describe a case in which the initial presentation was granulomatous iritis without involvement of lungs, lymph nodes (mediastinal and superficial), or skin. Serum angiotensin-converting enzyme was elevated. Biopsy of a nodule within the iris disclosed the characteristic noncaseating epithelioid granuloma.

Dr. Donovan is with the Department of Pathology and Dr. Aquilla is with the Department of Ophthalmology at Kent and Queen Anne's Hospital, Chestertown, Maryland. Reprints: Dr. Donovan, Kent and Queen Anne's Hospital, Chestertown, MD 21620.

Sarcoidosis is a chronic, multisystem granulomatous inflammatory disease of unknown cause that can occur in any organ of the body.[1] The most common sites of involvement are the lymph nodes, lungs, skin, and eyes. The patient may present to a variety of medical specialists, thus all should remain aware of this disorder.

Anergy is common in this disease, and circulating T-lymphocytes are depressed in number and function. Sarcoidosis is also characterized by distinctive laboratory abnormalities including hypercalcemia, hyperglobulinemia, and elevated serum angiotensin-converting enzyme levels. Biopsy specimens of focal lesions show noncaseating epithelioid granulomas. The diagnosis should be regarded as established for clinical purposes in patients with consistent clinical features and a characteristic biopsy specimen.

The course of sarcoidosis is highly variable, ranging from an acute process with spontaneous resolution, to a chronic disease affecting the skin exclusively, to a debilitating entity causing blindness or progressive respiratory insufficiency. Sarcoidosis rarely causes death, however.[2]

Ocular involvement in adult sarcoidosis has been reported to range from 9 percent to 64 percent.[3-4] The most important of the ocular complications of sarcoidosis is iritis. Painless, small, white nodules are usually seen in the crypts and on the margins of the iris. The choroid is less frequently affected than the iris, but occasionally yellow nodules or discrete localized zones of chorioretinitis are seen. Keratic precipitates (KP) are usually of the "mutton fat" type, semitranslucent, and often are slightly pigmented, with an irregular distribution.

Additional ocular manifestations of sarcoidosis are numerous: the episclerae may be the site of nodules, particularly over the insertion of the recti muscles. Conjunctival granulomas occur in at least one third of patients with systemic sarcoidosis[5] and are easily accessible for biopsy diagnosis. Band keratopathy of the cornea is sometimes seen. The retinal involvement usually consists of periphlebitis; nodules, however, have been reported in the retina and optic nerve. Sarcoid nodules in the lids and painless swelling of the lacrimal gland occasionally are encountered.

The following case is one in which granulomatous iritis was the sole initial presentation. There was no evidence of intrathoracic disease or peripheral lymphadenopathy. Serum angiotensin-converting enzyme was elevated. Biopsy showed noncaseating epithelioid granuloma.

Case Report

A 22-year-old black male machine worker complained of irritation and redness of his eye that he attributed to a small foreign body having been implanted by a drill he used at work. Physical exam failed to disclose a foreign body but revealed marked ciliary flush, keratic precipitates in the anterior chamber, and 3+ aqueous flare. Posterior synechiae (adhesions of the iris pigment to the anterior lens capsule) were noted. The diagnosis of granulomatous iritis was made. There was no history of tuberculosis or syphilis. After standard topical cycloplegic and steroid (1 percent Prednisone Acetate q.4 h.) therapy was instituted, the patient was seen over the following weeks. Diamox was added to lower increasing intraocular pressure. Systemic prednisone therapy was then begun.

Nine weeks after the original visit, a white, umbilicated mass was seen for the first time within the iris stroma. Paracentesis was performed. Cytology showed no evidence of malignant cells, and acid-fast organisms were not demonstrated on smear. Chest X-ray was clear. Tuberculin skin test was negative. FTA was negative. Serum angiotensin-converting enzyme was elevated to 165 units (44–125 units normal range).

On September 11, 1985, approximately 2 months after his initial visit, the patient underwent biopsy of a nodule of the iris. The patient was blocked in the VanLint fashion with a retrobulbar injection of 2 percent Xylocaine and 7½ percent Marcaine for a total of 8 cc. The limbus-based conjunctival flap was turned laterally. An M-52 Beaver blade was used to enter the anterior chamber at the 9 o'clock position of the limbus. This incision was extended with Castroviejo corneal-scleral scissors to approximately 4 mm. Kelman forceps were used to grasp the iris, and a sector-type iridectomy was performed. The wound was sutured with 10-0 nylon, and the conjunctiva was closed with 8-0 Dexon continuous. A ½cc solution of Decadron was injected in the subtenon space.

Microscopic examination of the biopsy specimen revealed a nodular, circumscribed granulomatous process without evidence of caseation (Figure 1). Higher magnification revealed epithelioid cells that, in some areas, formed giant cells with randomly scattered nuclei (Figure 2). The histologic picture was consistent with sarcoidosis. On September 25, 1985, culture for mycobacteria was reported negative. On examination of the surgical specimen, no foreign bodies were seen with or without polarized light. Stains for fungi and acid-fast organisms gave negative result.



Figure 1. Section of nodule within iris showing noncaseating granuloma. (H + E ×150)

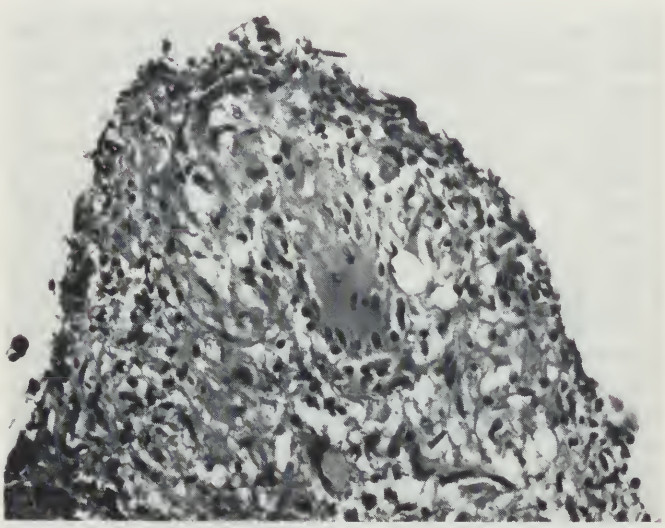


Figure 2. Section of granuloma showing giant cell formation. Note randomly scattered nuclei. (H + E ×1000)

Comment

Sarcoidosis, a worldwide disease, affects blacks in the United States ten to twenty times more often than whites. Awareness of the disease by a variety of specialists is essential if sequelae are to be limited. The usual presentation with lymphadenopathy and/or dyspnea may migrate to a generalist, chest physician, or oncologist.

Less commonly, as in this presentation, ophthalmologists may encounter "red eye" (uveitis) or "dry eye" (lacrimal gland involvement) in an otherwise asymptomatic black patient with sarcoidosis. Dermatologists should harbor suspicion on palpation of firm, erythematous subcutaneous nodules in the anterior tibial area (erythema nodosum is the most common nonspecific cutaneous manifestation of sarcoidosis).

When erythema nodosum is present, the sarcoidosis is usually characterized by bilateral hilar adenopathy, uveitis, fever, and arthralgia or arthritis. This syndrome (Lofgren's) is an acute form of sarcoidosis that resolves without treatment in 90 percent of individuals. The diagnosis of a specific cutaneous sarcoidal granuloma is made on biopsy; these lesions are not diagnostic clinically. It has been said that sarcoidosis should be considered in the differential diagnosis of almost any skin lesion.

Often the chest roentgenogram may be suggestive of sarcoidosis, and the clinician is faced with the problem of the most expeditious way to confirm the diagnosis. Well-standardized Kveim antigen is not widely available today. Scalene, mediastinal lymph node, and liver biopsies have a high positive yield, but these procedures may be associated with considerable morbidity. Other suggested sites of biopsy include conjunctiva, cutaneous lesions, subcutaneous nodules, and enlarged parotid glands. Conjunctival biopsy in particular can be done as an office procedure under local anesthesia. It is still controversial whether biopsy of a clinically normal conjunctiva should be done if sarcoidosis is suspected. There are case reports, however, of positive biopsies from apparently normal conjunctiva under slit-lamp examination in cases of sarcoidosis.[6]

The role of serum angiotensin-converting enzyme deserves comment. This enzyme has been found to be significantly elevated in patients with sarcoidosis in comparison to control populations and patients with other disorders.[7] The levels of the enzyme seem to

parallel disease activity, and with treatment the levels decrease toward normal. False-positive results do occur and have been seen in patients with Gaucher's disease, leprosy, various forms of carcinoma, and tuberculosis.[8]

It appears, then, that an elevated level of angiotensin-converting enzyme may support a diagnosis of sarcoidosis but is not in itself diagnostic. Many investigators have suggested the combined use of angiotensin-converting enzyme levels and gallium scan as a more specific test for sarcoidosis. In the case presented, however, the patient failed to report for a scheduled gallium scan.

References

1. Stizbach, L.E.; James, D.G.; Neville, E.; *et al.* "Course and Prognosis of Sarcoidosis Around the World." *Am J Med* 57(1974):847.
2. Wurm, K. and Rosner, R. "Prognosis of Chronic Sarcoidosis." *Ann NY Acad Sci* 278(1976):732.
3. Schlaegel, T.F., Jr. and Coles, R.S. "Uveitis and Miscellaneous General Diseases." In Duane, T.O.: *Clinical Ophthalmology.* Hagerstown, MD: Harper and Row, 1978, Vol. 4, Ch. 53, pp. 6–11.
4. Obenauf, C.D.; Shaw, H.E.; Sydnor, L.F.; *et al.* "Sarcoidosis and Its Ophthalmic Manifestations." *Am J Ophthalmol* 86(1978):648.
5. Solomon, O.A.; Horn, B.R.; Byrd, R.B.; *et al.* "The Diagnosis of Sarcoidosis by Conjunctival Biopsy." *Chest* 74(1978):271.
6. Khan, F.; Wessely, Z.; and Seiff, N. "Conjunctival Biopsy in Sarcoidosis." *Ann Ophthalmol* 8(1977):671–76.
7. Schultz, T.; Miller, W.C.; and Bedrossian, C.W.M. "Clinical Application of Measurement of Angiotensin-converting Enzyme Level." *JAMA* 242(1979):439.
8. Lieberman, J.; Nosal, A.; Schlessner, L.A.; *et al.* "Serum Angiotensin-converting Enzyme for Diagnosis and Therapeutic Evaluation of Sarcoidosis." *Am Rev Respir Dis* 120(1979):329.

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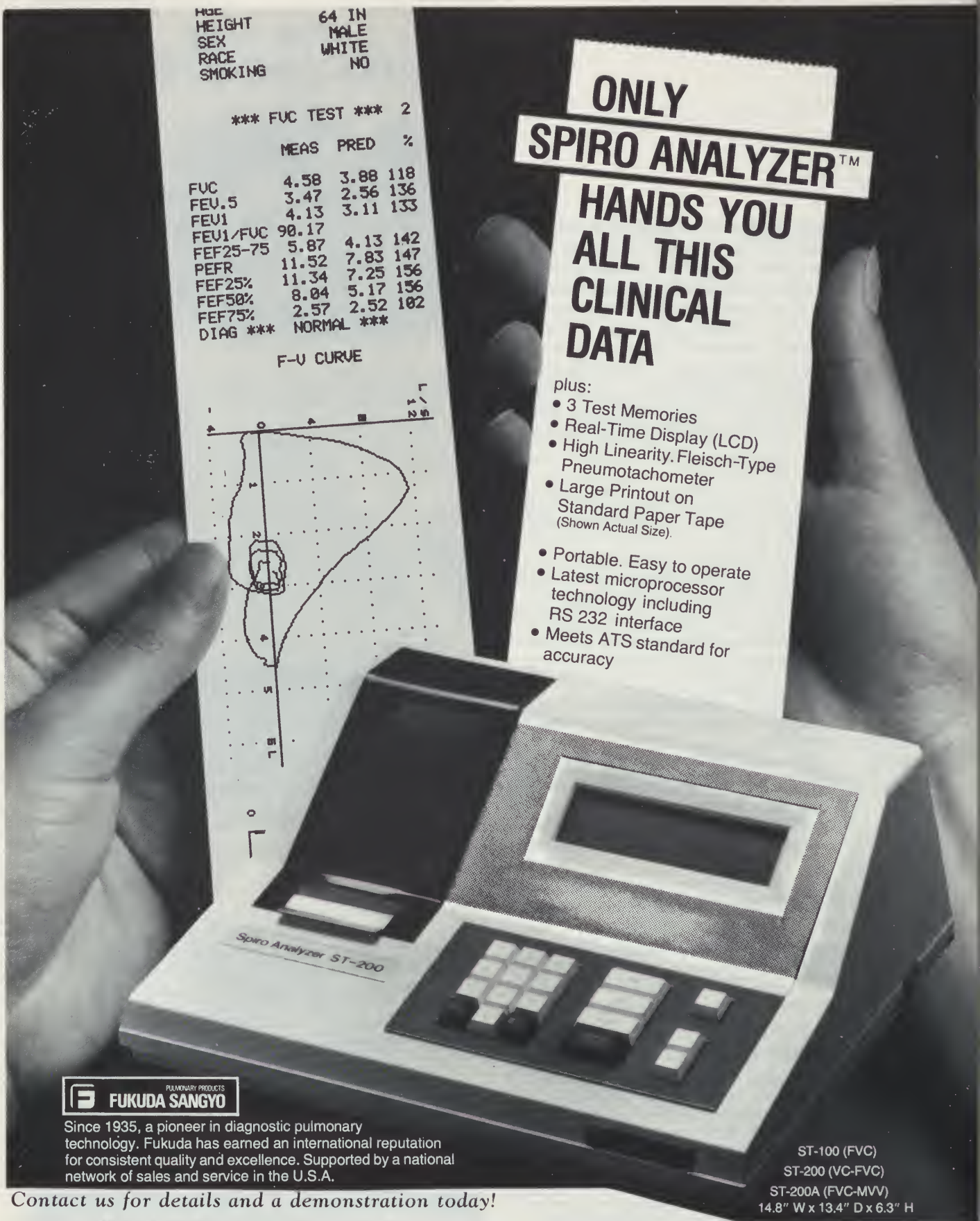
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Closure in Biomedical Technology Assessment: Consensus Development

JOHN T. KALBERER, Jr., PhD

Science is a discipline predicated on debate. Intellectual dispute and collegial colloquy have produced some of our most telling revelations and discoveries. While this interchange should never be stifled, it should nevertheless be productive. Debate without resolution can be stimulating, but for the exercise to have utilitarian meaning, it should have an outcome. In scientific as well as other disputes, we refer to this outcome or resolution as "closure."

Kalberer is NIH Coordinator for Disease Prevention and Health Promotion. The views expressed herein are those of the author and do not necessarily reflect the views of the National Institutes of Health or the Department of Health and Human Services. Parts of this paper were presented at a meeting of the Institute of Society, Ethics and the Life Sciences, the Hastings Center, Hastings-on-Hudson, New York.

Among the numerous and varied scientific disputes for which we seek closure, those that involve the health and well-being of man are paramount. Historically, the question of what constitutes optimal medical care in a given situation has engendered almost as many opinions as there are practitioners and patients. Today, with the proliferation of new biomedical technologies that have resulted from a strong commitment to biomedical research, the alternatives (and, concomitantly, the differences of opinion) have increased greatly.

As disputes in medicine have become commonplace, the consequences of not "resolving" them can be significant. Accordingly, this article presents a process conceived and implemented by the National Institutes of Health (NIH) for helping to resolve medical issues and, at the same time, for assessing, validating, and diffusing information relative to medical procedures, drugs, and devices. This method is known as *consensus development.*

The technique also is being applied for resolving scientific disputes in the United Kingdom. In 1984, a UK consensus development conference on coronary artery bypass surgery engendered much discussion and debate that continues today. The fact that closure was achieved but disagreements still exist, however, is in no way at odds with the consensus objectives. As the UK conference's organizer and chairman have stated: "The (consensus) statement should be as much the beginning as the end of the debate. Indeed the publicity attracted by such conferences should encourage more critical scrutiny of the evidence and by a wider group of people."[1]

The following description of the NIH Consensus Development Program should make clear that the largest sponsor of biomedical research in the United States is continuing its concerted effort to bring complex and controversial scientific disputes to closure, so that results can be used by practitioners and patients to improve the public health.

NIH Consensus Development Program

The key element in the Program is the consensus development conference (CDC), which brings together scientists, practitioners, consumers, and others in an effort to reach general agreement as to the safety and efficacy of medical technologies. These conferences differ from standard scientific state-of-the-art meetings in that consensus panels must consider a specific set of pre-posed questions in an open forum where all sides of the issue are explored. After listening to a series of presentations by experts, these panels are then asked to draft a set of recommendations framed around the original questions and directed to the technology under discussion.[2,3] The resultant panel report, referred to as the "consensus statement," is widely disseminated to all interested parties.

The prevailing view, after conduct, completion, and closure of more than fifty CDCs over the past eight years, is that consensus statements have proved useful to practicing physicians and in nearly all instances have received wide and thorough attention. Selecting topics of concern and immediacy (such as AIDS, mammography, Reye's syndrome, coronary artery bypass surgery, melanoma, osteoporosis, critical care, and the like) has assured active participation and detailed coverage. In several cases, the public has drawn from the consensus statements for guidance in selecting a preferred mode of treatment. A prime example of such "informed consent" being inspired by a conference's conclusion related to the screening and treatment of breast cancer (five CDCs have addressed the topic of breast cancer), with consensus-enhanced, revised guidelines for mammography and support for a two-stage surgical procedure both being defined and disseminated from NIH-sponsored meetings.

Another positive impact of the consensus conferences has been encouragement for, and an evident increase in, individual patients making joint decisions concerning their health with their physicians. The input of a private citizen at a 1979 CDC addressing "Estrogen Therapy in Postmenopausal Women" resulted in a marked change in viewpoint and recognition of the fact that, wherever possible, the patient's feelings and fears should be factored into treatment decisions.

The public has become familiar with consensus state-

ments through electronic media coverage, and has discovered concise and comprehensive CDC writeups (in summary form) in the medical sections of local newspapers and popular periodicals. The latter is especially true for issues that primarily involve women: impressive articles on CDC's addressing such subjects have appeared in *Vogue*, *Harper's Bazaar*, *Glamour*, *Self*, and similar monthly magazines.

From the feedback received and evaluation studies performed, experience indicates that the consensus development mechanism fosters the production of sound recommendations likely to receive wide acceptance. The aim is to identify both the valid advances and the gaps in a given field of knowledge, using the experience and expertise of a heterogeneous group of individuals and organizations representative of a wide range of disciplines, to ensure that the conclusions reflect balanced points of view. The opportunity for open discussion and public debate (as just described) helps to clarify findings, issues, and points of view. Active participation of all concerned parties in the decision-making process also promotes the acceptance and application of the conclusions reached.

The conferences initially were envisioned to address primarily emerging technologies that, in the opinion of some, were tending to remain too long in investigative circles. In practice, however, the need exists to balance early assessment against the requirements of assembling a sufficient base of science on which to form sound judgments. Consequently, the conferences have come to be seen as an opportunity for clarifying issues and amassing the best current knowledge on all therapies, whether new or existing, on which some new facts have come to light. Neither have the CDCs been confined to a single technique—drug, device, or procedure; often the assessment mechanism has been used to evaluate the relative merit of multiple approaches to a complex problem (obesity, febrile seizures, lower blood cholesterol, and so on).

Consensus Process and Closure

Consensus development as practiced at the NIH represents a clear example of "*negotiation closure*." As defined by Tom L. Beauchamp of the Kennedy Institute's Center for Bioethics, this form occurs if and only if a controversy is settled through an intentionally arranged and morally satisfactory resolution "(requiring) the reaching of conclusions that are morally justified because they are answers derived from well-defined arguments."[4]

Consensus has been defined by NIH as the best general agreement or accord obtainable among those concerned regarding the safety and efficacy of important medical interventions. The term does not necessarily connote unanimity, although there has been total accord in many conferences. This is in keeping with Beauchamps observation that negotiation closure does *not* require "that there be only *one* 'correct' or at least 'best' answer to the central question constituting the controversy." Such sweeping judgments are rarely possible or appropriate in the practice of medicine.

Perhaps the simplest way to demonstrate why consensus development is a case of negotiated closure is to discuss briefly why it could not be successful using any of the other three methods advanced by Beauchamp in his seminal work on the subject of closure. Consensus could not be "*sound argument closure*" because the deliberative panel makes no claim that its findings are "correct" or absolute; rather, the outcome is believed to be the best collective judgment of an informed group of individuals at a given point in time. If the safety, efficacy, and all attendant implications of complex medical interventions lent themselves to unerring determination prior to their widespread use, we would have no need for second opinions, review boards, or malpractice insurance.

Similarly, consensus in medicine could not rely on "*procedural closure*" (or cloture) because, despite a pragmatic need to end discussion so that the consensus statement can be drafted and read in plenary session prior to the conference's conclusion, productive debate is not stifled and controversy is not closed off from further discussion. Consensus development encourages inclusion of minority opinions when there is genuine disagreement and, of necessity, the consensus recommendations must always be adaptable to new developments and data. As Duclaux observed in his biography of Louis Pasteur, "A series of judgments, revised without ceasing, goes to make up the incontestable progress of science."[5]

Beauchamp's third sense of closure, "*natural death closure*," represents an extremely remote possibility in the field of medicine, particularly since the topics selected by NIH for consensus assessment are, by intention, either new or just emerging and/or the subject of current controversy and public interest. Due to the timeliness of the assessments, it is extremely unlikely that a consensus issue would "crest as a topic of controversy or lose its status as a topic of controversy"[4] prior to resolution.

Importance of Closure

It is readily recognized that in social endeavors it is important to achieve closure in a wide variety of disciplines and disputes. In few fields, however, can this need be as great as in matters of human health. In

medicine, nearly all arguments concerning treatment will be morally defensible, ingrained, and reinforced through years of practice. Beauchamp[4] observes:

> In those cases when an end to the controversy is more important than a continuation of fruitless argument . . . justifying the taking or acceptance of a position different than the one believed to be ideal emerges as the central problem.

In debates surrounding a number of other types of controversies (for example, gun control, abortion, capital punishment, involvement in Central America, terrorism) there is not overwhelming likelihood of closure, since a prescribed action will in all probability not result from the debate, due to the complexity of the issues involved. Conversely, in assessing medical drugs, devices, and procedures, a prescribed action (that is, recommended modes of treatment) is inherent in the debate, and thus some form of negotiated closure is necessary for the exercise to have utilitarian meaning (to be more than just a sharing of ideas, as in a scientific state-of-the-art meeting).

Because the objective is to provide specific guidance, in effect, to attempt to assist in updating the textbook of medicine, there is pressure on the consensus panel to accept less than optimal positions to reach a negotiated conclusion. Equally as important as updating the textbook of medicine is a willingness to add new chapters, so that emerging technologies can, with prudence, be identified, assessed, understood, and applied. As Sir Francis Bacon observed more than four centuries ago in his *Essays: Of Innovations*: "Surely every medicine is an innovation; and he that will not apply new remedies, must expect new evils."

Clearly, before these innovations are widely diffused into the practice of medicine, a careful and critical assessment of their safety and efficacy, risks and benefits, and other implications is called for. As a forerunner, there must be a systematic mechanism for identifying those technologies having the greatest potential impact (in both a positive and negative sense), tracking their development, and determining their readiness for scientific assessment. Following the assessment, NIH has the responsibility for conveying consensus findings through an established dissemination mechanism and, where applicable, facilitating and accelerating the potential for its application. All this, however, must be accomplished within the changing and challenging political, social, and ethical environment that surrounds the practice of medicine.

Political and Ethical Overlay

Today, few areas are free from external forces, and rare is the dispute that can be settled without considering and involving a number of outside groups. The NIH Consensus Development Program is no exception.

Different specialties often bring varying viewpoints to the consensus deliberations, and these viewpoints are carefully balanced in an effort to achieve neutrality. Specialties involved have included surgeons, internists, pediatricians, epidemiologists, biostatisticians, obstetricians/gynecologists, bioethicists, and the like. Because the entire process represents an example of "negotiation closure," tradeoffs must occur frequently in reaching compromise agreements. Similarly, compromises must be made in structuring the panels, particularly in assuring adequate representation of both academicians and practitioners.

In many ways, the academic and practicing communities represent different interests, but they play an important complementary role that is essential for the formulation of meaningful consensus statements. Neutral panels, preferably composed of persons who have not yet taken a public position on the subject being debated, are strongly encouraged: (a) for balance; (b) to avoid degeneration of the discussion into conflict; and (c) to improve the likelihood that the resultant opinions will be viewed as fair and acceptable.

Individual examples of disputes and their resolutions are too numerous to discuss here, but two in particular merit mention. One is the conference that assessed the primary treatment of breast cancer, in which the question of radical mastectomy versus less disfiguring surgery was the central issue. The conference had come about, in part, due to public pressure on the scientific community to reexamine the existing one-step surgical procedure (that is, a woman undergoing a biopsy without knowing whether she would emerge from the operating room with her breast).

Surgeons were opposed to a two-stage procedure that would involve the patient in the surgical decision following her biopsy because it was inconvenient, time consuming, and required anesthetizing the patient twice, which they felt constituted a form of "double jeopardy." At this particular conference, the input of a consumer panelist and former mastectomy patient, who emphasized a woman's right to participate in decisions so clearly affecting her physical and mental health, was a crucial factor in the panel's ultimate advocacy of the two-stage method. This instance, and another occasion when a patient's testimony about her difficulties after postmenopausal estrogen use was denied her, are in concert with Stephen Toulmin's finding that "the whole emphasis of the Human Experimentation Commission's deliberations changed after the recipients of the treatment (in his case, prisoners) were consulted."[6]

The other instance of a major dispute between specialties occurred in a previously planned meeting, in

which all but 2 of the 13 panelists selected were practicing specialists. The Office of Medical Applications of Research (OMAR), as part of its mandated responsibility to monitor and coordinate all technology assessment activities at NIH, found that the proposed panel did not provide adequate representation for a proper consensus-building exercise. When the sponsoring Institute was unwilling to include more nonpracticing specialists on the panel except for a biostatistician and a preventive medicine expert, NIH withdrew recognition of the meeting as a consensus development conference. Instead, the meeting took place as a state-of-the-art exercise.

Political and Ethical Influences on Consensus Development

As Toulmin pointed out in his case study on the National Commission on Human Experimentation, the motives for establishing the deliberative body were ethical and political. He cites the controversy raised in *One Flew Over the Cuckoo's Nest* and remarks that impanelling the Commission represented "Congress' first tentative intrusion—by way of a highly controversial procedure—into the protected world of regular medical and surgical practice."

The intrusion is now more than tentative, and it would be impossible and wrong, to ignore the outside factors and pressures that bear on medicine. Examples of these influences are numerous, such as the public outcry and political reaction to Legionnaires' disease, swine flu, AIDS, David Rorvik's controversial book on the purported cloning of a man, the findings of the Beahrs' committee on breast surgery, and countless reports on the hazards of mammography, the Pill, asbestos, and the like. In addition, it has been alleged that "science has little or no apparatus to handle faked data, plagiarism, and other scientific crimes."[7]

The following NIH consensus development conferences have been motivated and influenced, at least in part, by political, social, and ethical considerations. Unlike Toulmin's observation that, in the case of the Human Experimentation Commission, "politics won out over ethics," this has never occurred in NIH consensus development.

As was the case with the Commission on Human Experimentation, NIH makes "no attempt to define issues of strict 'fact' for determination *in isolation* from all ethical considerations or 'value' questions."[6] Medical technologies cannot be assessed in a vacuum. We also recognize that the necessary bioethical expertise does not reside in NIH, which is primarily a research institution.

Selected NIH Consensus Topics Having Political, Social, and/or Ethical Overlay

- Breast Cancer Screening
- Asbestos
- Distribution of Insect Sting Kits
- Tonsillectomy and Adenoidectomy
- Lung Cancer Treatment
- Sickle Cell Disease
- Antenatal Diagnosis
- Third Molars (Wisdom Teeth)
- Intraocular Lenses
- Estrogen Use
- Chemotherapy for Breast Cancer
- Cesarean Childbirth
- CT Scanning
- Coronary Bypass Surgery
- Pap Smears
- Reye's Syndrome
- Hip Joint Replacement
- Critical Care Medicine
- Liver Transplantation
- Drugs and Insomnia
- Pharmacologic Prevention of Mood Disorders
- Electroconvulsive Therapy

Key Elements in Closure Process

In advancing his policy for negotiation closure, Beauchamp suggests five directives that should be met. These five points can be directly applied to the NIH program and, consequently, are worth briefly paraphrasing here as further indication of how closely consensus development fits the concept of negotiation closure.

1. *Beliefs must be consistent with the set of moral propositions that no one can rationally deny.*
   In medical disputes, these "givens" are that treatments must be safe and efficacious, techniques cannot present significant risks when balanced against benefits, that human (and to a lesser extent, animal) subjects must be protected, and similar inarguable contentions.
2. *Obtainable factual information having a significant bearing on the outcome of the controversy must be assembled.*
   This is a prerequisite for consensus development (that is, the existence of a solid scientific base on which to render judgments) and, as was shown in the case of the etiology of Reye's syndrome, when sufficient data do not exist, consensus is not attempted.
3. *There must be a method to distinguish between universalizable moral principles and those nonuniversalizable claims rooted in self-interest, obstructive forms of ideology, religious bias, etc.*
   This has been accomplished by concentrating on the key scientific issues in the debate and clearly recognizing, as in the cases of third molar removal, tonsillectomy, and adenoidectomy, that the judgment must be based on the science of the technology, not potential economic gains.
4. *Beliefs should be favored that are most coherent with the total set of beliefs ... and the adjustment of*

principles and judgments should be encouraged rather than inhibited by the attempt to achieve coherence. This is the root of "consensus," and the insistence on open debate with all viewpoints aired satisfies the second part of the directive.

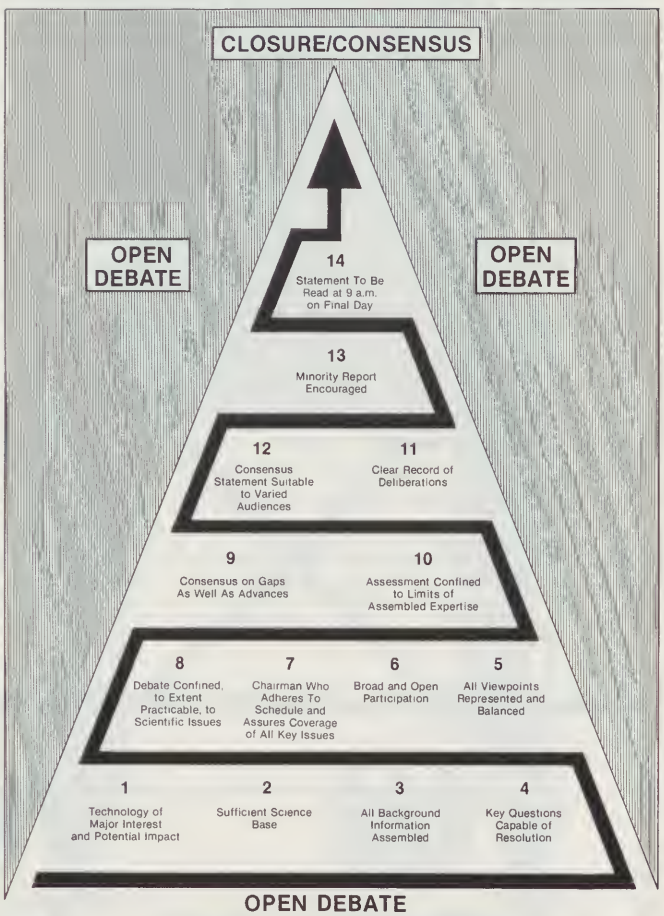
5. *The resolution should be comprehensive, but at the same time should not incorporate more rules and concepts than are necessary and certainly no more than affected persons are able to remember and apply without confusion.*
   This again is vital to medical consensus development, since the closure achieved must be capable of being put into practice. Consensus statements are expressed in a clear fashion, readily understandable to both practitioners and the public, and are intended as an easy-to-follow guide to those who must use, and those who must avail themselves of, the medical technology.

Basically, closure is made possible in consensus development by proper planning and adherence to certain pre-set criteria. These imperatives designed to hasten resolution of scientific issues (Figure) include:

- The need to select questions that are susceptible of solution;
- The need for broad and open participation and a careful balancing of inevitable bases among the presenters and deciders;
- The importance of making available a clear record of deliberations;
- The need to explain conclusions in terms suitable to the varied audiences with an interest in the outcome;
- The need to achieve consensus on the gaps in knowledge as well as on the advances; and
- The desirability of confining the search for authority within the limits of expertise assembled.[8]

By making certain *in advance* that there is a sufficient science base, that key questions are framed so as to lend themselves to consensus resolution, that all viewpoints are represented (both on the panel and in the presentations), and that the process is timely and reactive to new developments while producing results suitable for periodic review, each consensus development conference begins with a strong likelihood of closure. When this is coupled with tight and deliberately "inducing" deadlines (such as the fact that the participants, press, and public are awaiting the reading by the panel chairman of a final draft consensus statement at 9 a.m. on the third and final day) closure is not only attainable but also reasonably assured.

Figure.
KEY ELEMENTS LEADING TO CLOSURE IN CONSENSUS DEVELOPMENT



Minority Report

Even with planning and these imperatives, however, unresolvable disagreements between one or two panelists and the rest of the group will, on occasion, persist. In these instances, the goal of closure should be served by encouraging the dissenting panelists to submit a minority opinion for inclusion in the consensus statement. In this way, a proper and full recommendation (accompanied by a minority report) can receive widespread dissemination and attention, rather than its being "watered down" to reconcile opposing viewpoints.

Conclusion

Beauchamp concludes that the justification of a closure policy "finally rests on its suitability as a process of reasoning leading to morally satisfactory negotiation closure. If there is a policy best adapted for achieving

this form of closure, then it and no other is justified."[4]

The NIH Consensus Development Program has given structure (formalized to the extent practicable) to decision making on medical technologies. The outcome of the closure achieved (the consensus statement) synthesizes and crystalizes divergent data that require excerpting from many personal and published sources, and does so in an anticipatory manner for topics that are, or will be, of major importance.

Robert Coulson, President of the American Arbitration Association, stated in a presentation entitled "How Safe is Safe?" that, "Of course, in the best of all possible worlds, the scientific community, peering into the future, recognizes that scientific data to settle disputes will be required in due course and embarks upon serious studies of such areas of future controversy well in advance of the ultimate impasse."[9] Clearly, the best of all possible worlds has yet to be created, but a viable, proved, and effective means of bringing about closure on biomedical technological advances and applying results of these advances to the practice of medicine is alive and well at the National Institutes of Health.

References

1. Stocking, B. and Jennett, B. "Coronary Artery Bypass Consensus." Letter to the Editor. *Lancet* 2(1985):158.
2. Perry, S. and Kalberer, J.T. "Special Report: The NIH Consensus Development Program and the Assessment of Health Care Technologies." *N Engl J Med* 303(1980):169–72.
3. Lowe, C.U. "Consensus in Medicine: The Consensus Development Programme: Technology Assessment at the National Institutes of Health." *Br Med J* 280(1980):1583–84.
4. Beauchamp, T.L. "Ethical Theory and the Problem of Closure" (background paper for the Hastings Center's meeting of the closure group) March 1981: esp. 2, 6, 16–19.
5. Duclaux, E. Pasteur: The History of the Mind (translated by Smith, E.F. and Hedges, F.). Philadephia: W.B. Saunders, 1920, p. 111.
6. Toulmin, S. "The National Commission on Human Experimentation: Procedures and Outcomes (background paper for the Hastings Center's meeting of the closure group). March 1981: 2, 10–12.
7. Hills, P. "Anticancer Drugs Given Despite Kidney Failure Link." *Washington Post*, April 2, 1981:A5.
8. Fredrickson, D.S. "Seeking Technical Consensus on Medical Interventions (editorial). *Clin Res* 26(1978):113–15.
9. Coulson, R. "How Safe is Safe?" (background paper for the Hastings Center's meeting of the closure group). March 1981: 3.

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BRIEF SUMMARY

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist).

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

CARDIZEM 30-mg tablets are supplied in bottles of 100 (NOC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other. Issued 4/1/84

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References: 1. *Physicians' Desk Reference®*, ed 39. Dradell, NJ, Medical Economics Company Inc, 1985. **2.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **3.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982; 50(Sept):94-116. **4.** Subramanian VB: Comparative evaluation of four calcium antagonists and propranolol with placebo in patients with chronic stable angina. *Cardiovasc Rev Rep* 1984; 5:91-104. **5.** Schroeder JS, Feldman RL, Giles TD, et al: Multiclinic controlled trial of diltiazem for Prinzmetal's angina. *Am J Med* 1982; 72:227-231. **6.** Weiner DA, McCabe CH, Cutler SS, et al: The efficacy and safety of high-dose verapamil and diltiazem in the long-term treatment of stable exertional angina. *Clin Cardiol* 1985; 7:648-653. **7.** Shapiro W. Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. *Consultant* 1984; 24(Dec):150-159.

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J-6138 January 1986

"High blood pressure should be a red flag to screen for cholesterol..."[1]



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Philadelphia, PA 19101

If your patients have hypertension, they probably have high cholesterol too.

The Framingham Heart Study[2] showed that over two thirds of the 35 and older population in that study with systolic blood pressures over 145 mmHg also had serum cholesterol levels of 225 mg/dL or more, and 46% had levels above 250 mg/dL.

While many clinical laboratories still report 250 mg/dL as "normal" cholesterol, the NIH Consensus Development Conference Statement on Cholesterol and Heart Disease[3] stated that any level above 220 mg/dL is associated with a significantly increased risk of coronary heart disease.

You need to know, because high cholesterol parallels high blood pressure as a CHD risk factor.

Epidemiological studies and large-scale prevention trials have indicated that as with blood pressure, serum cholesterol levels are proportionately related to CHD risk. Specifically, *"...for every 10 mmHg rise in pressure, there appears to be about a 30% rise in cardiovascular risk."*[4] *"...for every one percent you go up the American cholesterol scale, your subsequent rate of heart attack rises two to three percent."*[5]

And although the specific impact on CHD has not been determined, we know that many of the principal agents used to lower blood pressure actually increase cholesterol.

Wytensin® lowers blood pressure effectively without raising cholesterol.

While Wytensin is not a cholesterol-lowering agent and is not indicated for the treatment of hyperlipidemia, in controlled clinical trials[6] it caused a slight, sustained decrease in total cholesterol without reducing the HDL fraction or altering serum triglycerides.

At the same time, Wytensin lowered blood pressure as effectively as hydrochlorothiazide, propranolol, clonidine or methyldopa. Drowsiness and/or dry mouth, the most frequent side effects noted with Wytensin, usually diminish or disappear over time. In fact, in double-blind studies to date, discontinuance of therapy for all side effects occurred in about 13% of patients.

Wytensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol



See important information on following page.

References: 1. Glueck CJ: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 2. *The Framingham Study, An epidemiological investigation of cardiovascular disease*, Section 28, U.S. Dept. of Health, Education, and Welfare. 3. National Institutes of Health Consensus Development Conference Statement, 1984 Vol 5, No 7, p 4 4. Chobanian AV: The influence of hypertension and other hemodynamic factors in atherogenesis. *Progress in Cardiovascular Diseases, XXVI* (3): 177, Nov/Dec, 1983. 5. Castelli WP: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 6. Data on file, Wyeth Laboratories.

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WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic.

Contraindication: Known sensitivity to the drug.

Precautions: 1. Sedation: Causes sedation or drowsiness in a large fraction of patients. When used with centrally active depressants, e.g., phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2. Patients with vascular insufficiency: Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure. 3. Rebound: Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology.

INFORMATION FOR PATIENTS: Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy. Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly.

LAB TESTS: In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction. In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS: **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e.g., digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials. However, potential for increased sedation when given concomitantly with CNS depressants should be noted

DRUG/LAB TEST INTERACTIONS: No lab test abnormalities were identified with **Wytensin** use.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e., about 10 times maximum recommended human dose. In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes. No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture. In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY: Pregnancy Category C: WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN. A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg. These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits. However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg). Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg. There are no adequate, well-controlled studies in pregnant women. **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus.

NURSING MOTHERS: Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE: Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S. and is based on data from 859 patients on **Wytensin** for up to 3 years. There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b.i.d.

Adverse Effect	Placebo (%) n = 102	Wytensin (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial. Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time. In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20%. Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less. Cardiovascular—chest pain, edema, arrhythmias, palpitations. Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort. Central nervous system—anxiety, ataxia, depression, sleep disturbances. ENT disorders—nasal congestion. Eye disorders—blurring of vision. Musculoskeletal—aches in extremities, muscle aches. Respiratory—dyspnea. Dermatologic—rash, pruritus. Urogenital—urinary frequency, disturbances of sexual function. Other—gynecomastia, taste disorders.

Drug Abuse and Dependence: No dependence or abuse has been reported.

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years. Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both. Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic. Vital signs and fluid balance should be carefully monitored. Adequate airway should be maintained and, if indicated, assisted respiration instituted. No data are available on **Wytensin** dialyzability.

Dosage and Administration: Individualize dosage. A starting dose of 4 mg b.i.d. is recommended, whether used alone or with a thiazide diuretic. Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response. Maximum dose studied has been 32 mg b.i.d., but doses this high are rarely needed.

How Supplied: (guanabenz acetate) Tablets, 4 mg, bottles of 100 and 500; 8 mg and 16 mg, bottles of 100. Revised 2/14/85

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Ad Council

TWELVE IMPECCABLE EXCUSES FOR NOT GIVING BLOOD.

"1. I think I have lumbago.
2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
5. I just got back from Monaco.
6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia."



Each one's a doozy, but we're hoping you won't use any of them. Give blood through the American Red Cross. Please, don't chicken out.

EXCUSES DON'T SAVE LIVES. BLOOD DOES.

American Red Cross

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

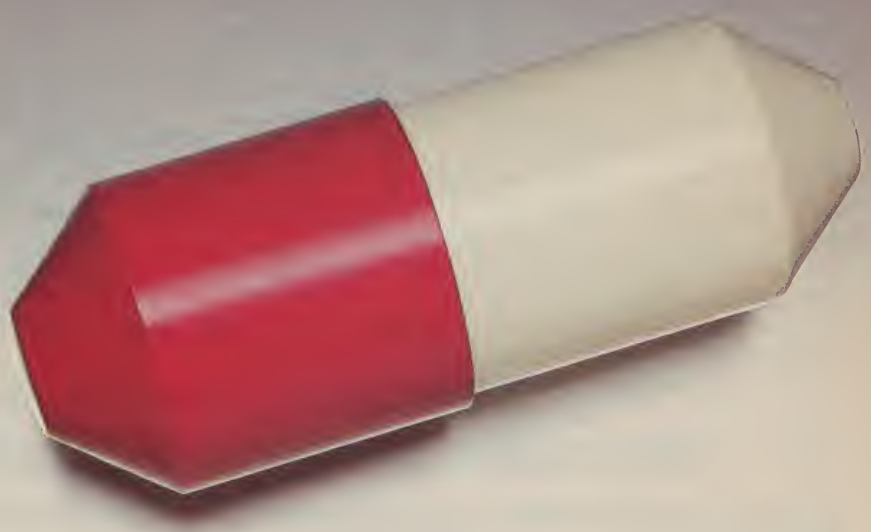
Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ-L42

In Hypertension*... When You Need to Conserve K^+

Remember the Unique Red and White Capsule: Your Assurance of SK&F Quality

Serum K^+ and BUN should be checked periodically (see Warnings and Precautions).



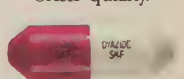
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25 mg Hydrochlorothiazide/**50 mg** Triamterene/SKF

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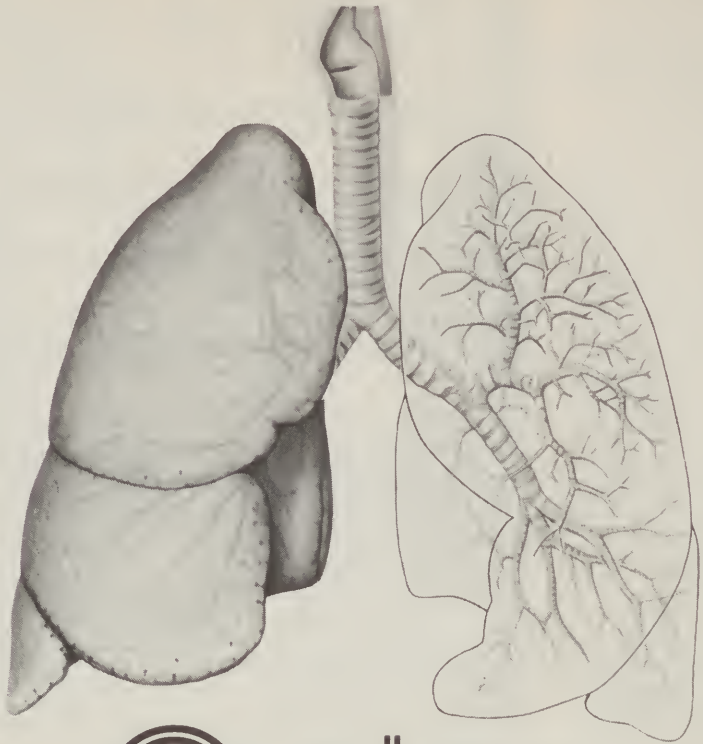
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cefaclor

250-mg Pulvules® t.i.d. offers effectiveness against the major causes of bacterial bronchitis

Haemophilus influenzae*, *H influenzae*, *Streptococcus pneumoniae*, *Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor® is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor™ (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly)

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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Letter to the Editor

Malpractice Suits and Countersuits

I am grateful to Dr. Zimmerly for space to respond to some of the problems he reviewed in "Another Look at Professional Liability Insurance."[1] The malpractice problem has grown remarkably since I left medical school 50 years ago, but reliable statistics defining its magnitude are somewhat illusive. In 1973, however, a federal commission (HEW) formed to investigate the issue noted that approximately 70 medical malpractice claims were opened on the average working day in 1970 (18,000 annually).[2] The literature (medical and lay) indicates that the case load continues to grow.

How many of these tort actions may be classed as frivolous? Perhaps the word "frivolous" is ill chosen, and the claim might be better classified as without merit. Mallen,[3] a respected attorney from San Francisco, notes that frivolity is in the eye of the beholder, for the frivolity of one individual may be the ingenuity of another. A great difference exists between a malpractice action brought despite the improbability of success and a meritless suit. The latter action results in injustice and needs to be discouraged.

Nevertheless, many health providers are convinced that the vast majority of claims are without merit. Again, statistics are hard to uncover, but when the HEW commission requested insurers of 16,000 claim files closed in 1970 to indicate whether or not these claims were meritorious in terms of liability, they judged that 54 percent were not so.[2] In another instance, a Pima, Arizona report concluded that 57 of 65 arbitrated claims (87 percent) over a period of 12 years were without merit.[4] If payment to a plaintiff is considered to make the claim meritorious, then 45 percent of the 16,000 claims filed in 1970 were in that classification (HEW).[2]

Zaremski,[5] to whom I made reference in my previous letter, made two suggestions to lessen the number of claims made: require suing attorneys to investigate the allegation of malpractice carefully prior to bringing suit and, later perhaps, sue the attorney for barratry when indicated. The failure to require any investigation by an attorney prior to instigating legal action encourages the filing of baseless suits against innocent health care providers and other professionals.

The aspect an attorney may assume toward his client was explored by Boswell in 1768 when he asked Johnson if the practice of law hurt the nice feeling of honesty.[6] Johnson replied, "Why no, Sir, if you act properly." Boswell offered a further question. "But what do you think of supporting a cause which you know to be bad?" The answer was, "Sir, you do not know it to be good or bad until the Judge determines it."

*Send letters to Editor, **MMJ**, 1211 Cathedral Street, Baltimore, MD 21201. We reserve the right to edit all submissions as necessary for clarity and conciseness.*

Birnbaum,[7] quoting the American Bar Association Code of Professional Responsibility, states that the attorney owes a duty to his client to present his case vigorously, but the attorney cannot completely disregard the rights of the defendant physician. Countersuits, started in such an environment, have proved to be ineffective retaliatory weapons for injured physicians. Philippi,[8] in the *Valparaiso Law Review*, notes that the plaintiff physician must ordinarily plead and prove five elements to be successful: initiation or continuance of a prior judicial proceeding by the attorney against the physician; termination of the previous suit in favor of the physician; initiation or continuance of the initial suit without probable cause; malice must be shown; and actual damages occur.

Malice, however, is a question of fact to be decided by a jury. The issue of damages is more difficult to interpret as the "American" rule allows recovery for any injury incurred by the plaintiff, but a sizable majority of the states inhibit recovery for malicious prosecution unless the physician can show special injury such as physical arrest or interference with property ("English" rule).[8]

Unquestionably, the number of countersuits that will be successful under these conditions will be small. Philippi[8] reported that only three verdicts for physicians against attorneys have been upheld at appellate levels. Few countersuits have been successful in the United States, apparently due to the inherent difficulty of proving the *prima facie* elements of malicious prosecution. Because more than half the claims made are without merit, a deep-seated conviction is still manifest in the medical and lay press that legislative action must be soon taken. The problem of unjustified medical malpractice actions is a matter of deep concern, moreover, and has been the subject of a number of legal reviews.[4,7–11]

Dr. Zimmerly[1] notes that the Legal Resources Fund, Incorporated, of Washington, DC has yet to see a successful countersuit pursued by the fund since it was created in 1977. A note from the director of the fund corroborates his observation.[12]

The District of Columbia Court of Appeals has made it clear that the law in the District does not favor countersuits. The Court has endorsed a strict rule of damages that makes prosecution of a successful countersuit virtually impossible.

Over the years, the Fund reviewed a number of potential countersuit cases but did not act until what was thought to be a suitable case was found in Maryland. The Fund supported the efforts in Maryland courts. Litigation was lengthy and hard fought but the Maryland Court of Special Appeals rejected the physician's claim. The Court acknowledged that the attorney never had evidence to justify legal action against the physician, but the Court concluded that the law in

Maryland did not provide relief for a physician faced with such an unfortunate situation.

Thus, the law has been tested but once during the nine years of the Fund's existence. The Trustees of the Fund believe that physicians are concerned about countersuits but are hampered by present law.

Used properly, the countersuit is an effective weapon, but when indiscriminate actions are started, the entire scenario can be counterproductive for the physician alone and the medical profession as a whole. A reputable attorney will not represent a physician in a countersuit unless the client has a clear-cut chance of winning and a equally lucid understanding of the legal process that will follow.

These issues aside, the main thrust of my previous letter was the way in which physicians might avoid suit. The Quality Assurance Committee of each hospital should exert a strong influence on the conduct of every member on its hospital staff. Responsibility for the ethical and professional practices of its members should rest firmly with the Medical Staff and its Executive Committee. If this process is carried on continuously and effective action taken, the number of malpractice claims will drop.

JOSEPH M. MILLER **MD**
Director of Medical Education
Provident Hospital, Inc.

References

1. Zimmerly, J. "Another Look at Professional Liability Insurance." *MMJ* 35(1986):37.
2. Medical Practice. *Report of the Secretary's Commission on Medical Malpractice, 1973.* Washington: Department of Health, Education, and Welfare, p. 146.
3. Mallen, R. Referred to by Philippi, M.J. "Malicious Prosecution and Medical Malpractice Legislation in Indiana: A Quest for Balance." *Valparaiso U L Rev* 17(1983):877.
4. Brooke, J.W. "Medical Malpractice: A Socio-economic Problem from a Doctor's View." *Willamette L J* 6(1970):225.
5. Zaremki, M.J. "Doctors and Lawyers as Adversaries: Stemming the Tide of Malpractice Litigation." *For the Defense* 26(1984):22.
6. Boswell, J. *Boswell's Life of Johnson*, 1953 Edition. London: Oxford University Press, p. 388.
7. Birnbaum, S.L. "Physicians Counterattack: Liability of Lawyers for Instituting Unjustified Medical Malpractice Claims." *Pacific L J* 12(1981):745.
8. Philippi, M.J. "Malicious Prosecution and Medical Malpractice Legislation in Indiana: A Quest for Balance." *Valparaiso U L Rev* 17(1983):877.
9. Adler, A.P. "Malicious Prosecution Suits as Counterbalance to Medical Malpractice Suits." *Cleveland State L Rev* 21(1972):51.
10. Kisner, P. "Malicious Prosecution: An Effective Attack on Spurious Medical Malpractice Claims." *Case Western Reserve L Rev* 26(1976):653.
11. Greenbaum, H. "Physician Countersuits: A Cause Without Action." *Pacific L J* 12(1981):745.
12. Dietrich, R.A. Personal communication.

The Library Page

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during March 1986.

		No. of Citations
1.	Attention deficit disorders	33
2.	Breast carcinoma in males	30
3.	Elective mutism in children	22
4.	Goldenhar syndrome	34
5.	Hydrosalpinx of the fallopian tubes	26
6.	Liposuction or body contouring	42
7.	Mycoplasma pneumonia and bacterial antibodies	34
8.	Sucralfate	40
9.	The Caldwell-Luc operation	25
10.	Treatment of thoracic outlet syndrome	24

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

SUSAN E. HARMAN
Reference and Circulation Librarian

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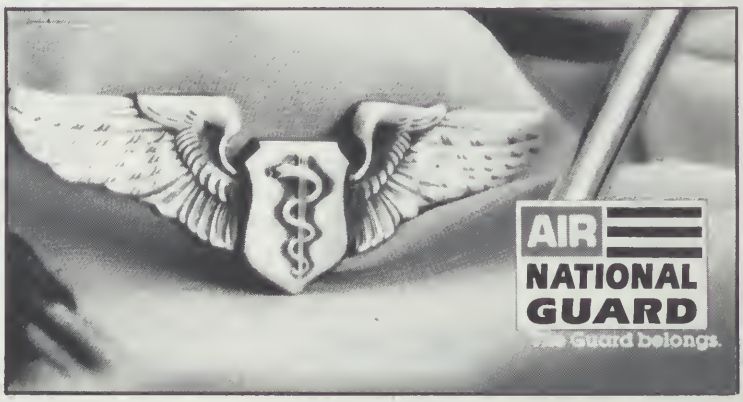
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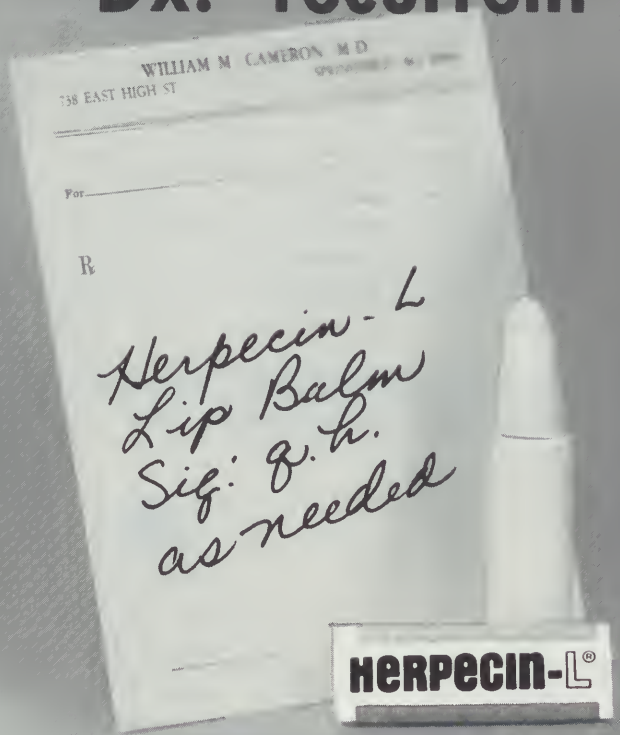
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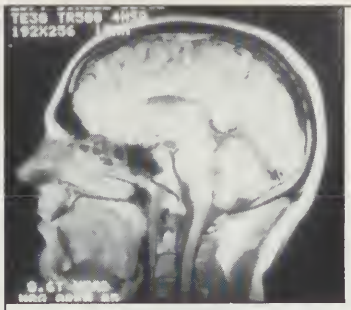
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Jun 22–27 12th Annual Family Medicine Review Course. Carousel Hotel, Ocean City. Fee: $350; special daily fee: $85. 25.75 AMA Cat I credits.

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Jun 25 Advanced CPT-4, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jun 26 Managing the Business Side, conducted by AMA's Department of Practice Management, in Philadelphia, PA. Info: 312-645-4958.

Jul 25–27 Eighth Annual Pediatrics at the Beach presented by the Department of Pediatrics, Children's Medical Center and the Office of Continuing Medical Education at the Medical College of Virginia, will be held at the Cavalier Resort Hotel in Virginia Beach. 12 AMA Cat I credits, 12 AAP PREP credits, 12 AAFP credits, and 1.2 CEU's from the Virginia Commonwealth University. Info: B. Winn, Box 48, MCV Station, Richmond, VA 23298-0001 (804-786-0494).

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All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985–86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Jul 14–18 Control of Biohazards in the Research Laboratory. Info: B. Tepper, Director, Safety & Environmental Health (301-955-5918) or J. Dorn, Director, Continuing Education Program (301-955-2609).

Sep 5–7 15th Annual Diagnostic Ultrasound in Obstetrics and Gynecology, Baltimore Mariott-Inner Harbor. Fee: physicians $325, sonographers/RNs $250; 18 ¾ AMA Cat I credits, ACOG cognates available. Info: C. Kearney, 301-955-3168.

Sep 18–19 Pediatrics for the Practitioner, Update '86. Fee: physicians $175, nurse/practitioners & retired physicians $125, interns & residents $75; 13 AMA Cat I credits. Info: J Ryan, 301-955-5880.

Sep 22–26 28th Annual Emil Novak Memorial Course: Gynecology, Gynecologic Pathology, Endocrinology, and Obstetrics. Fee: $550, $400 residents; 45 AMA Cat I credits, ACOG cognates. Info: C. Kearney, 301-955-3168.

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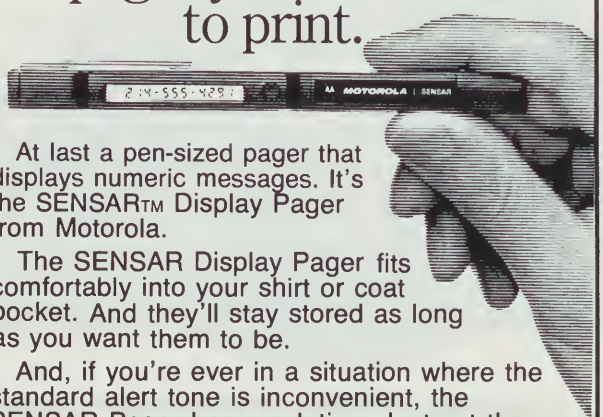
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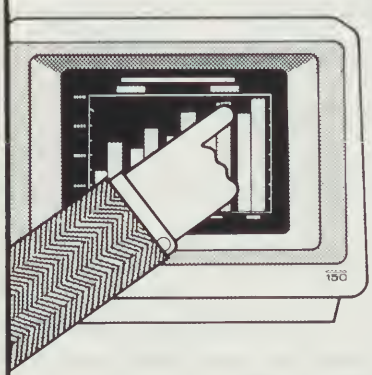
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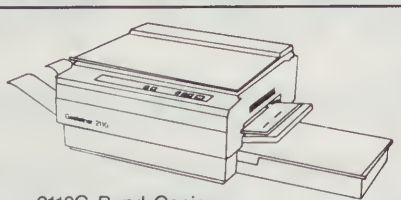
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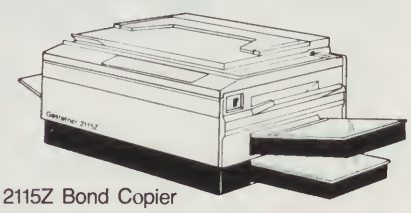
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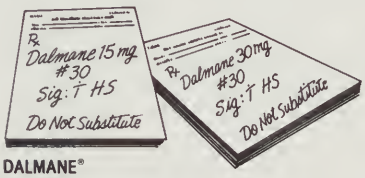
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References: **1.** Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shoder RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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MMJ

July 1986

Maryland Medical Journal



Charles Frick

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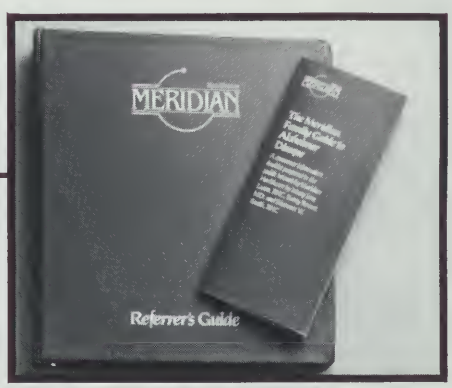
A specialty Alzheimer Disease Care Unit has been created at Meridian Nursing Center—Heritage in consultation with The Johns Hopkins University Medical Institutions to develop innovative approaches to care. To advance this research, Meridian funds an Alzheimer Disease Research Fellowship in The Johns Hopkins University Department of Psychiatry.

Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

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On the cover: An oil portrait of Charles Frick MD (1823–1860), painted by John Dabour (1837–1905) in 1899 from a photograph, hangs in the Frick Reading Room of the Library of the Medical and Chirurgical Faculty (article begins on page 577).

The views in this publication are those of the authors and do not necessarily reflect the opinion of the Medical and Chirurgical Faculty of the State of Maryland.



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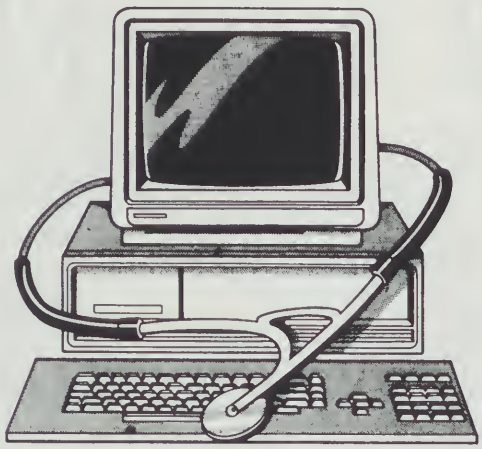
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July 1986

REPORTABLE COMMUNICABLE DISEASES IN MARYLAND IN 1985

(Continued from June Newsletter)

ROCKY-MOUNTAIN SPOTTED FEVER (27) - The cases occurred in April through August. One clinical case, reported in October, could not be confirmed. The incidence rate (0.63/100,000) was more than twice that of the United States as a whole (0.29/100,000). The diagnosis was confirmed in 74% of the patients (compared to 57% nationwide) by showing an indirect fluorescent antibody (IFA) titer of 1:64 or greater, complement fixation (CF) titer of 1:16 or greater, or a fourfold rise in titer by the CF, IFA, microagglutination (MA), latex agglutination (LA), indirect hemagglutination (IHA) assay or positive FA of tissue. Two cases were classified as probable as indicated by a fourfold rise in titer by the Weil-Felix assay. Eighty-two percent (81.5%) of the patients were male; most had a history of tick bite or attachment and some had visited tick infested areas within 14 days. Eighty-five percent of the cases required hospitalization. The outcome was fatal for an 81 year old white male.

RUBELLA (5) - Rubella morbidity has been depressed this year and for the previous two years with a combined total of nine cases for all three years. All but one of the five cases reported this year were adults in one household; the 5th case was presumed to be the index case to the others but was not proven.

SALMONELLOSIS (1504) - The pattern of increase in incidence (3.5/100,000 in 1985) that started in 1976 continued and the cause(s) for the increase are still not clear. Almost half of the cases occurred in Baltimore City and Baltimore and Anne Arundel counties. A high percent (39%) of the illness affected children less than 5 years old. Males and females were equally affected. The 5 most prevalent serotypes were S. typhimurium - 409 (27%), S. enteritidis - 285 (19%), S. heidelberg - 196 (13%), S. infantis - 52 (3.5%), and S. newport - 47 (3.1%). For 1/4 of the cases the serotype remained unspecified.

S. TYPHI CARRIERS (5) - Each year in the past 5 years, there have been an average of 5 newly discovered carriers. All chronic carriers are under the supervision of the local health departments and are excluded from occupations involving foodhandling and care for patients, children and the elderly. Release from supervision occurs only after six consecutive negative cultures of feces and urine (done at the State Laboratory) taken 1 month apart.

SHIGELLOSIS (190) - The illness continued to decrease from the peak year of 1983, when an outbreak of Sh. dysenteriae type 2 dysentery occurred at the U.S. Naval Hospital, Bethesda. The most prevalent isolate this year, Sh. sonnei, caused 73% of all reported cases, followed by Sh. flexneri - 19%. These figures are similar to those reported for the United States as a whole. Most infections took place in June and July. The incidence in Baltimore City (13/100,000) was 5 times greater than that in the rest of the counties combined (2.6/100,000). Forty-six percent of the patients were younger than 10 years of age, with a peak of occurrence among 1 and 2 year olds.

SYPHILIS (500) - Baltimore City had the 12th highest rate (39.4/100,000) for primary and secondary syphilis among the United States' major cities, and Maryland ranked 12th among all states with a rate of 11.4/100,000). Reported was also 1 case of congenital syphilis.

TUBERCULOSIS (434) - The incidence of tuberculosis increased 1.6% from 1984. Twenty-nine percent of the new cases occurred in foreign born residents of Maryland. Drug resistant organisms were present in 10% of these cases. The most striking statistic is the increase in mortality. In 1984, there were 19 tuberculosis related deaths. In 1985, this figure escalated to 33 tuberculosis related deaths. This mortality needs to be examined more closely.

TYPHOID FEVER (12) - Some of the patients were originally from India (1), Pakistan (1), El Salvador (1) or had recently visited Central America (9). One of the cases occurred in the family of a chronic carrier of S. typhi. Nine of the affected were young adults in the age group 15 through 31.

GUIDELINES FOR DISPOSAL OF NEEDLES, SYRINGES AND FOMITES CONTAMINATED BY BLOOD OR BODY FLUIDS IN NON-INSTITUTIONAL SETTINGS*

1. All items contaminated with blood, exudates or other body fluids should be considered to pose a risk of transmission of infection including hepatitis B and HTLV-III.

2. DO NOT bend or clip used disposable needles before disposal. Do not recap needles.

3. Discard disposable needles and syringes into impermeable, puncture proof containers immediately after use. When a container is filled to capacity, fill the container with a freshly prepared solution of household bleach (5.25% sodium hypochlorite), no more dilute than 1 part bleach in 9 parts water, and securely seal the container. Having thus been rendered noninfectious, the sealed container may be incinerated at a licensed incinerator (the preferred method of disposal) or disposed of in another manner which is appropriate for waste of this nature.

4. All disposable items which pose a risk of accidental wounds (e.g., disposable scalpel blades, sharps, etc.) should be disposed of, after a single use, in the same manner as needles.

*Institutions licensed by the Department of Health and Mental Hygiene such as hospitals, nursing homes and clinical laboratories must follow the requirements detailed by the licensing agency and licensing regulations.

5. When using non-disposable syringes and disassembly is necessary, needlestick injuries can be avoided by using a device designed to remove the needle and/or replace the cap. Manual recapping should be avoided.

6. Non-disposable needles, syringes and other reusable sharps which penetrate the skin should be cleaned and sterilized prior to reuse.

7. Contaminated fomites which do not pose a risk of accidental wounds, (example: soiled dressings, disposable gloves, etc.) may be placed in a heavy duty plastic bag and saturated with a freshly prepared solution no more dilute than 1 part household bleach in 9 parts water. Seal the bag and place inside a second heavy duty plastic bag and seal the outside bag. Dispose in the usual manner for trash.

Prepared by the Department of Health and Mental Hygiene and approved by the Governor's Task Force on AIDS.

These guidelines are in conformance with the existing Guidelines for Disposal of Infectious Wastes and with proposed regulations addressing the same topic developed by the Office of Environmental Programs, Maryland State Department of Health and Mental Hygiene.

RECOMMENDATIONS FOR PREVENTING TRANSMISSION OF HTLV-III INFECTION IN THE WORKPLACE: Health Care Workers

Human T-lymphotropic virus type III (HTLV-III) is the viral agent responsible for acquired immune deficiency syndrome (AIDS). Persons who become infected with HTLV-III virus may develop AIDS, which is fatal, may develop an illness which is less severe and non-fatal, or may experience no symptoms of disease.

Because AIDS is a bloodborne, sexually-transmitted disease that is not spread by casual contact, routine screening of Health Care Workers (HCWs) for HTLV-III antibody has not been recommended. Specific recommendations for health care workers who perform invasive procedures have been developed.

These guidelines are addressed to HCWs including, but not limited to, nurses, physicians, dentists and other dental workers, optometrists, podiatrists, chiropractors, laboratory and blood bank technologists and technicians, phlebotomists, dialysis personnel, paramedics, emergency medical technicians, medical examiners, morticians, housekeepers, laundry workers and other whose work involves contact with patients, their blood or other body fluids or corpses. These guidelines are also addressed to Personal Service Workers (PSWs) whose work involves instruments that penetrate the clients' skin or contact with clients' blood or body fluids including but not limited to: tattooing, ear piercing, electrolysis and acupuncture.

1. Precautions appropriate for preventing transmission of bloodborne infectious disease including HTLV-III and hepatitis B virus (HBV) infections should be employed routinely regardless of whether HCWs or patients are known to be infected with HTLV-III or HBV.

2. HCWs, including students and housestaff, should be educated regarding the epidemiology, modes of transmission, and prevention of HTLV-III infection.

3. In spite of the extremely low risk of transmission of HTLV-III infection, even when needlestick injuries occur, precautions aimed at preventing accidental needlestick injuries must be emphasized and used routinely.

4. Precautions to prevent transmission of HTLV-III and other bloodborne infections should be used routinely.
   a) Sharp items (needles, scalpel blades and other sharp instruments) should be considered as potentially infective and be handled with extraordinary care to prevent accidental injuries.

   b) Disposable syringes and needles, scalpel blades and other sharp items should be placed into impermeable, puncture resistant containers located as close as possible to the area in which they were used. To prevent needlestick injuries, DO NOT recap, bend or clip used needles prior to disposal. Nor should needles be removed from disposable syringes or otherwise manipulated by hand. When the puncture-resistant containers are full, they should be removed intact and sent directly for incineration. In non-institutional health care settings where an infectious waste incinerator may not be readily available, the impermeable puncture proof container may be filled with a freshly prepared solution of 1 part household bleach (5.25% sodium hypochlorite) in 9 parts water, securely sealed and disposed of in a manner appropriate for noninfectious waste of this nature.

   c) Gloves should be worn routinely any time items soiled with blood or equipment contaminated with blood or other body fluids are to be handled.

   d) Hands should be thoroughly washed with soap and water after handling patients, before and after performing venipunctures and immediately if they accidentally become contaminated with blood or other body fluids.

   e) Gloves, gowns, masks, and goggles should be worn during procedures involving more extensive contact with blood or potentially infective body fluids. Examples include some dental or endoscopic procedures, post mortem exams and embalming.

   f) Parenteral or mucous membrane exposures to blood or body fluids should be handled according to DHMH guidelines.

   g) Within hospitals and other institutions, mouth pieces, resuscitation bags or other ventilation devices should be strategically located and available for use in areas where need for resuscitation is predictable to minimize the need for emergency mouth to mouth resuscitation.

   h) Pregnant HCWs are not known to be at greater risk of contracting HTLV-III infection than HCWs who are not pregnant.

5. Blood and other body fluids may be flushed into the sanitary sewer system.

6. Disposable equipment and fomites which have been contaminated with blood or body fluids should be disposed of in a manner consistent with existing DHMH regulations on the disposal of infectious waste.

Adapted from: MMWR Vol. 34, No. 45, 1985.

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Insurance Monitor

West Virginia Cancellations

The St. Paul Fire and Marine Insurance Company, the CNA Insurance Company of Chicago, and the Ohio Hospital Insurance Corporation served notice of their intent to cancel malpractice insurance for physicians and doctors in West Virginia, effective May 31. According to Insurance Commissioner Fred E. Wright, the companies object to a new state law that imposes new claims settlement rules and restricts an insurance company's ability to refuse to renew particular medical malpractice policies. The cancellations would affect approximately 2,500 health care providers and half the hospitals in the state. Governor Arch A. Moore is expected to call the legislature into special session to reconsider malpractice insurance matters.

• • •

Florida Suit

The family of a physician who has been in a coma for three years recently settled a medical malpractice suit for $7.3 million. The physician, who entered a Miami hospital for diagnostic tests, suffered a reaction to an iodine dye in a CAT scan. He went into shock and then lapsed into a coma. The hospital paid $4 million, two radiologists at the hospital paid $2.8 million, and a pulmonery specialist paid $500,000. Attorneys for the plaintiffs had argued that quicker action by the hospital and its personnel would have prevented the physician from suffering permanent harm.

States Take Action

According to the National Conference of State Legislators, recent tort reform measures including the following:

- Maryland: Passed $350,000 cap on awards for "pain and suffering" in all personal injury cases; measure signed by the governor 5/27/86.
- Missouri: Enacted $350,000 limit for medical malpractice suits.
- South Carolina: Amended collateral source documentation.
- South Dakota: Passed $1 million limit for medical malpractice suits; measure before governor.
- Tennessee: Limited awards against liquor store owners for damages caused by the person who bought the liquor.
- Utah: Enacted $100,000 limit on medical malpractice suits.
- Washington: Passed floating limit (from $117,000 to $493,000) on "pain and suffering"; measure before the governor.
- West Virginia: Passed $1 million limit on medical malpractice claims; measure before governor.
- Wyoming: Limited liability of liquor store owners.

• • •

For more information or answers to your insurance questions, contact your insurance representative.

Coming in *MMJ*

August—Annual Reports and Faculty Transactions

September

Pertussis Immunization: Two Centuries of Controversy
by W. Robert Lange MD and Sidney D. Krieder MD

New Concepts in Management of Thyroid Nodules
by William A. Valente MD and Albert Seiguer MD

Anticonvulsant Regimens in the Treatment of Atypical Psychiatric Disorders
by Russell R. Monroe MD

Mandatory Seat Belt Laws: A Comparison **by James E. Burris MD**

Medical Miscellany

Maryland Eye Care Project to Help Disadvantaged Elderly

"Growing old does not necessarily mean going blind," is the message of the National Eye Care Project Helpline, designed to bring medical eye care to the nation's elderly, which opened in Maryland in May.

The NECP, locally sponsored by the Maryland Society of Eye Physicians and Surgeons, offers ophthalmological care to U.S. citizens and legal residents age 65 and over who have medical eye problems, but who don't have a medical eye physician.

By calling a toll-free Helpline—1-800-222-EYES—an elderly person will receive the name of a volunteer ophthalmologist who will treat the patient, regardless of the patient's ability to pay, and will accept Medicare or insurance assignment as payment in full.

The Helpline will match callers with ophthalmologists in their communities who are contributing their services. If hospital care is needed, the ophthalmologist will work with a local hospital to make care available. Hospital charges, eyeglasses, and prescription drugs are not paid for through the program.

When an elderly person calls the Helpline number, a computer will match the caller with a physician according to certain criteria: location (the Helpline will try to find an ophthalmologist as close to the patient's home as possible) and equable rotation among participating ophthalmologists.

The Eye Care Helpline, opening on a region-by-region basis over a six-month period, will be operating nationwide by July 21, 1986. The project, cosponsored by the Foundation of the American Academy of Ophthalmology, is supported by voluntary donations from ophthalmologists themselves and by contributions from corporations associated with the eye care profession.

Doctor, Planning to Relocate?

If you are moving or planning to, please let us know so that you won't miss a single issue of the **Journal.** Just fill out the form below and mail it to: Doris Cicchini, **Journal,** 1211 Cathedral St., Balto., MD 21201.

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Pediatric Lung Disease Resource Directory

The American Lung Association of Maryland has designed a comprehensive Resource Directory listing existing programs and services available to pediatric lung disease patients and their families. The Resource Directory provides information needed to make parents and health care and social services professionals more aware of available services, leading to increase in referrals and use of existing services and resources.

The first edition of the Resource Directory, compiled from questionnaires sent to various organizations throughout Maryland, is composed of three major sections: (1) a glossary of lung conditions; (2) an alphabetical listing of organizations including addresses, phone numbers, contact people, and a brief description of the services provided; and (3) an appendix listing each organization in the Directory and six categories of services: educational programs and resources, support groups, outpatient medical health services, financial aid, and nonfinancial aid.

The American Lung Association of Maryland, the Christmas Seal People®, will provide copies at no cost on request. Call 301-494-1100 or 1-800-492-7527.

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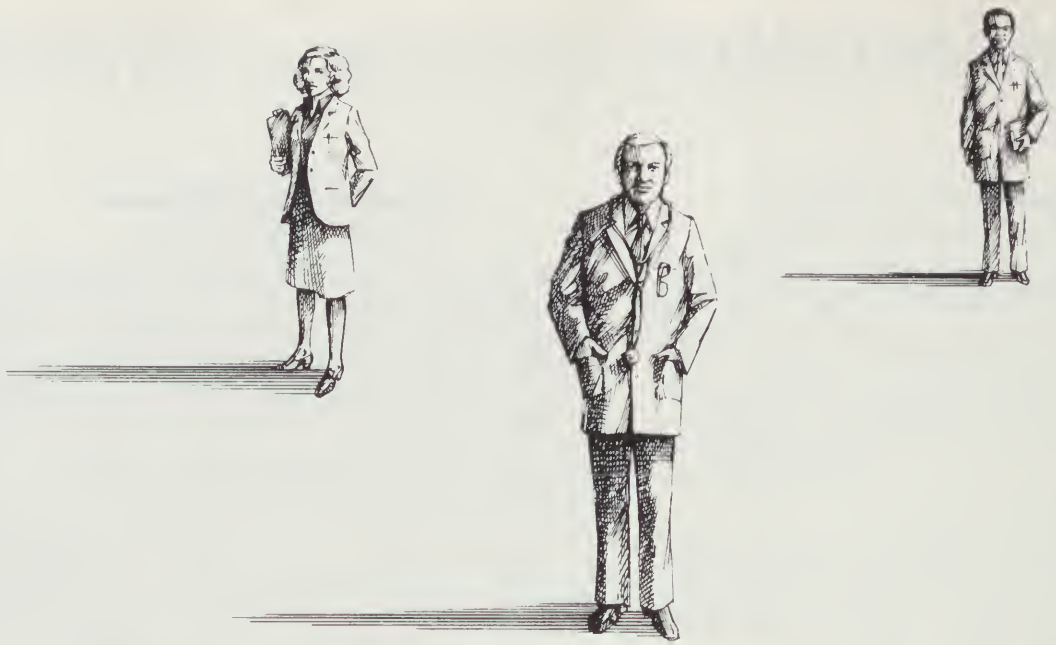
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Executive Director's Newsletter

July 1986

PRO REGULATIONS

The Faculty's PRO Monitoring Committee is collecting data about specific problems Maryland physicians and patients encounter because of Federal PRO regulations. Denied treatment, early discharge, and any other situation in which patient care is compromised are vital to this committee. This information has been requested, and to date very few reports have been received. Send any information along with written documentation so the Committee may investigate and make recommendations to Joseph Berman MD, PRO Monitoring Committee, 1211 Cathedral Street, Baltimore, MD 21201.

SPECIALIST IDENTIFICATION

Physicians may apply for identification as a specialist by the Board of Medical Examiners by completing an application and by providing evidence of qualification as a medical specialist. Information explaining the program and an application form will be mailed to all active licensed physicians in Maryland during September 1986.

GENERAL ACCIDENT INVESTIGATION

The Faculty is continuing to look into the circumstances surrounding General Accident's withdrawal from the Maryland insurance market and its impact on physicians. If you were insured by General Accident and renewed your policy in November or December 1985, or if you have questions concerning the investigation, please contact Judith A. Wood, Legal Counsel at the Faculty offices.

OFFICE LABORATORY EXAMINATIONS

Group practices of four or more physicians will be notified by the Laboratory Administration of eligibility for possible exemption from a required permit to perform office laboratory examinations. Details may be obtained from the Laboratory Administration at 301-225-6080.

AMA CONFERENCE

The AMA is offering a conference on Increased Competition in Medicine, September 5-6, at the Westin O'Hare Hotel in Rosemont, IL. The conference, tailored to the needs of practicing physicians, will instruct you in effective, practical responses to competitive forces. Small workshops during the conference will examine individual problems in depth.

Registration is $175 for AMA members and $225 for nonmembers. For phone registration or for more information, call toll free 1-800-621-8335.

DISCHARGE PLANNING GUIDELINES

The Maryland Hospital Association has published a pamphlet, Good Discharge Planning: Patient Advocacy At Its Best with guidelines to help health professionals do a better job of discharge planning. Free copies are available by calling the Faculty office at 1-800-492-1056 or 539-0872.

DEPARTMENT OF GOVERNMENT RELATIONS

The Council of the Faculty, at its meeting of June 26, approved creation of a Department of Government Relations. The need for a separate department staffed with full-time lobbyists was identified in the February planning retreat as a high priority item. The President and Chairman of the Legislative Committee collaborated in developing the scope of the department, which will also encompass the PAC activities.

John Stierhoff, former counsel to the Senate Judicial Proceedings Committee in Annapolis, has joined the Med-Chi staff as Director of the Department of Government Relations. Stierhoff, an attorney who also staffed the Governor's Task Force on Professional Liability, served as chief aide to Senator Thomas V. Mike Miller of Prince George's County. He is a graduate of the University of Baltimore Law School and served four years with the Maryland General Assembly.

MEDICAL MUTUAL RATE INCREASE

At 4 p.m. on June 30 the Insurance Division of the State of Maryland hand delivered a letter of approval to the Medical Mutual Liability Insurance Society of Maryland for its requested rate increase. Edward Muhl, Insurance Commissioner, said, in part, "In granting this approval, I note that your filing was justified based upon your past and prospective loss experience and expenses, including reinsurance costs. We have further determined that you have taken into consideration, in a reasonable fashion, the potential savings embodied in Chapter 639, Laws of Maryland for 1986."

Physicians facing major "buy-out" costs because of the withdrawal of General Accident from the market, who are Medical Mutual clients, may qualify for a loan program arranged through Maryland National Bank. Ask you broker for details.

Acting Executive Director

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HBP Commentary

Hypercholesterolemia: Nutritional and Pharmacologic Management

DIANE M. BECKER ScD, LORA BROWN WILDER RD, and THOMAS A. PEARSON MD

There is a growing awareness in the medical community that lowering blood cholesterol levels is important in the prevention of coronary heart disease. Many physicians have expressed a need for practical dietary, exercise, and pharmacologic approaches to the management of the hypercholesterolemic patient; specific suggestions follow.

Becker is Risk-Reduction Co-ordinator, The Johns Hopkins Preventive Cardiology Programs and Instructor in Medicine; Wilder is Cardiac Nutritionist, The Johns Hopkins Preventive Cardiology Programs; Pearson is Director, The Johns Hopkins Preventive Cardiology Programs and Associate Professor of Medicine and Epidemiology, The Johns Hopkins School of Medicine.

While many physicians believe that lowering cholesterol levels is important in preventing coronary disease (CHD), they think they lack the skills and knowledge necessary to treat hyperlipidemia.[1] The recommendations of the expert panel of the recent National Institutes of Health Consensus Conference on Lowering Blood Cholesterol now suggest treatment for the 25 percent of people who fall above the age and sex-adjusted 75th percentile of blood cholesterol.[2] For these moderate- and high-risk people, this will include dietary treatment; for fewer people, treatment will include pharmacotherapy.

The typical American diet includes a significant amount of saturated fat and cholesterol (Table 1). This diet has been associated with excessive levels of LDL cholesterol. For people above the 75th percentile of total cholesterol, significant "life-style" changes may be necessary to alter levels. Some may have isolated elevations of LDL cholesterol and others elevations of both LDL cholesterol and triglycerides. Hyperlipidemia may be genetic, dietary, or the result of secondary causes. When initiating therapy for hyperlipidemia, secondary causes should be sought and treated. Common secondary causes of elevation of LDL cholesterol include renal disease and hypothyroidism, while alcoholism and diabetes are common secondary causes of hypertriglyceridemia.[3] Obesity is often associated with mild to moderate elevations of both LDL cholesterol and triglycerides.

Dietary Interventions

The key to a lipid-lowering diet is restriction of fat, particularly saturated fat and cholesterol (Table 2). A diet to lower LDL cholesterol will include limitation of fat to ≤30 percent of total daily calories, with saturated fat contributing no more than 10 percent of total calories. Polyunsaturated to saturated fat ratio is 1:1 or slightly higher. Dietary cholesterol intake should not exceed 250 mg per day. On the average, a 10 to 15 percent reduction in serum cholesterol level can be achieved with adherence to this diet, and some patients will achieve even greater reductions.[4]

Health professionals and the public may experience confusion about the "good" and "bad" sources of fat in the diet. Dietary fat is composed of saturated fats, monounsaturated fats, and polyunsaturated fats. Saturated fats tend to increase cholesterol levels. Because red meats and dairy products are major sources of saturated fat in the American diet, limitations of red meat and use of low-fat, rather than whole milk prod-

Table 1. Composition of the Typical American Diet

	Current	Recommended*
Total cholesterol: mg day	500	250–300
Total fat: percentage of calories	40	≤30
Saturated fat: percentage of calories	15	≤10
Polyunsaturated fat: percentage of calories	6	10
Monounsaturated fat: percentage of calories	16	
Polyunsaturated to saturated fat ratio:	.4	>1

Adapted from Connor, W. and Connor, S. "The Dietary Prevention and Treatment of Coronary Heart Disease," in Connor, W. and Bristow, W. (eds). *Coronary Heart Disease: Prevention, Complications and Treatment.* Philadelphia: J.B. Lippincott, 1985.
* Greater restrictions may be required.

Table 2. Major Principles of a Cholesterol-Lowering Diet

1. Reduce intake of saturated fat.
2. Replace some of the saturated fat with polyunsaturated fat.
3. Reduce dietary cholesterol intake.
4. Increase fiber intake.
5. Achieve and maintain appropriate body weight.

Specific Dietary Changes to Lower Blood Cholesterol

1. Choose skim or lowfat milk products.
2. Reduce intake of red meats. Choose fish and skinless chicken and turkey in place of red meats.
3. Broil, bake, steam, or roast foods, instead of frying.
4. Limit egg yolk intake to 2 per week.
5. Use all fats sparingly, favoring vegetable oils and soft (tub) margarine over butter, solid shortening, and lard.
6. Reduce intake of commercial baked goods.
7. Increase intake of high fiber vegetables, grains, and fruits.

HBP Commentary is contributed by the Maryland High Blood Pressure Commission, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

ucts, is advisable when aiming to lower serum cholesterol. It should be noted that palm and coconut oils are saturated vegetable oils, often found in nondairy creamer and toppings, and are hypercholesterolemic. Monounsaturated fatty acids are present to some extent in all animal and vegetable fats. They have been considered to have no effect on plasma lipids, though this assumption is currently under investigation. Olive and peanut oils are rich in monounsaturated fatty acids. Finally, polyunsaturated fats have a cholesterol-lowering effect and include most vegetable oils as well as oils in fish. One component of fish oils, eicosapentaenoic acid, has been shown to have a significant cholesterol-lowering effect. This omega 3 fatty acid is widely distributed in fish and shellfish, though fattier fish like salmon and mackerel are especially good sources. Recently shellfish have been shown to have less cholesterol than previously thought and are acceptable in moderation.

Dietary cholesterol is present only in animal sources. The current daily average cholesterol intake of 400 mg for women and 500 mg for men far exceeds the 300 to 400 mg per day thought to be the cholesterol-elevating threshold for most individuals. Egg yolks, red meats, organ meats, and dairy products are major sources of dietary cholesterol in the American diet (Table 3). The recommendations for a maximum intake of 250 mg per day of dietary cholesterol is exceeded by 2 egg yolks at 500 mg or by a single serving of liver at 600 to 800 mg cholesterol.

Fiber, including guar gum and pectin, also helps to lower serum cholesterol levels. Not all fiber, however, has this effect. Legumes, oats, fruits, and vegetables are good sources of lipid-lowering fiber.

For people with both LDL and triglyceride elevations, the diet includes the same cholesterol-lowering components as well as weight control, restriction of alcohol, and substitution of complex carbohydrates for simple sugars. The omega 3 polyunsaturated fats, such as those found in fish, have been shown to have a significant impact on triglyceride levels as well as total cholesterol levels.

Physicians who believe they lack skills in dietary intervention can maximize the effectiveness of dietary advice by referring patients to a Registered Dietitian/nutritionist and by reinforcing the importance of change. Physicians also can assist patients in initiating change by offering them access to appropriate informational materials. Patient education materials are available from the American Heart Association and in the popular press.

Table 3. Major Contributors of Saturated Fat and Cholesterol in the American Diet

Food	% of total dietary cholesterol contributed	% of total saturated fat contributed
Red meats, lunchmeats and hot dogs	24	28
Eggs	36	4.5
Dairy products (whole milk, cheese, ice cream)	10	19.5
Doughnuts, cookies, cake	7	5

Adapted from Block, G. *et al.* "Nutrient Sources in the American Diet: Quantitative Data from the NHANES II Survey." *Am J Epidemiol* 122(1985):27.

Exercise

While physical activity has only a modest impact on LDL cholesterol levels, it may have a significant impact on triglyceride levels by increasing catabolism of triglyceride-rich lipoproteins. A regular physical activity regimen improves the probability of long-term success with weight-loss regimens. Exercise also has been associated with an increase in HDL cholesterol and may improve the overall LDL cholesterol to HDL cholesterol ratio, a summary value representing the relationship of atherogenic LDL cholesterol to the antiatherogenic HDL cholesterol. Persons 35 years of age or older, with a family history of premature coronary disease, or with symptoms should undergo exercise testing before they begin a physical activity program.

Pharmacotherapy

Pharmacologic regimens are required when patients with cholesterol levels ≥ the 90th percentile are unable to lower these levels with dietary therapy. People with early coronary disease or a strong family history of premature coronary disease may have a lower threshold for consideration of pharmacotherapy. Total cholesterol levels ≥300 mg/dl will usually require pharmacotherapy in addition to diet, although a trial diet of 2 to 3 months is warranted prior to considering medication.[5]

Bile sequestrants cholestipol and cholestyramine, are the frontline agents for lowering isolated LDL cholesterol elevations, by as much as 15 to 20 percent on the average and more in some cases. These resins work by preventing reabsorption of bile acids and possibly by increasing the number of LDL receptors. Bile sequestrants are not used in patients with concommitant elevations of triglyceride levels (above 400 mg/dl) as they may cause an increase in these levels.

These drugs are available in packets or bulk granular form and must be mixed with a liquid allowing the granules to absorb water over a five minute period. One packet or one scoop (5 gms cholestipol or 4 gms cholestyramine) is usually initiated 30 minutes before one or two meals and increased slowly over a period of weeks to a dose of 10 gms of cholestipol and 8 gms (two packets or scoops) of cholestyramine two or three times daily before meals, for a maximal daily dose of 30 gms of cholestipol and 24 gms of cholestyramine. An additional drug, such as nicotinic acid, may be considered if this regimen is ineffective.

Gastrointestinal symptoms and binding of other drugs and fat soluble vitamins are the most common serious problems associated with use of these bile acid sequestrants. Patients on other drugs, particularly warfarin and thiazide diuretics, should be monitored closely. Folate may also be sequestered in the gastrointestinal tract, and hematocrit should be monitored as well. Severe constipation occurs with relative frequency and may require long-term laxative use. Bile sequestrants are quite expensive. Cost, depending on location, is probably somewhat lower for cholestipol and for either drug purchased in bulk containers rather than packets.

Nicotinic acid is the second drug of choice in the treatment of elevated LDL cholesterol and the first choice for treatment of patients with concommitant triglyceride elevations. It acts by inhibiting production of both VLDL and LDL in the liver resulting in an average reduction of 15 to 35 percent in LDL cholesterol levels.

To minimize side effects, nicotonic acid therapy should begin slowly, with initial doses of 100 mg three times a day progressing to a maximal dose of 1 to 3 gm three times daily. Nicotinic acid is combined with bile sequestrants to achieve optimal lowering of LDL cholesterol in particularly resistant cases where a decrease in LDL of 50 percent or more may be achieved with combined therapy.

The major side effect of nicotinic acid is intense flushing shortly after oral ingestion. This may be accompanied by itching, nausea, and diarrhea. As this phenomenon, which occurs frequently during initial therapy, is thought to be prostaglandin-mediated, administration of a prostaglandin-inhibitor, such as a single adult aspirin 30 minutes before the nicotinic acid dose, may be useful. Symptoms often become less prominent after a stable dose is achieved. Because of its potential impact on hepatic function, patients receiving nicotinic acid should have liver function tests and uric acid levels monitored. Occasional patients have experienced arrhythmias associated with nicotinic acid use.

Probucol has been observed to have variable efficacy but may be used to lower LDL cholesterol when patients are unable to tolerate bile sequestrants or nicotinic acid. The mechanism of action is not clearly understood but on the average, probucol lowers LDL cholesterol by 8 to 12 percent using a dose of 250 mg to 500 mg twice a day. This, however, may be accompanied by a significant drop in HDL cholesterol. Probucol may be effective in combined regimens for resistant hypercholesterolemia.

Gemfibrozil is used to lower triglyceride levels. It appears to act by inhibiting VLDL synthesis and results in a decrease of VLDL of 40 percent and a 17 to 25 percent increase in HDL levels. Some long-term studies have demonstrated a lowering effect on LDL cholesterol, although this is not its primary use at present. The usual dose is two 300 mg capsules twice a day 30 minutes before meals for a maximal daily dose of 1200 mg. This drug is usually well-tolerated but may cause gastrointestinal distress.

Clofibrate and *d-thyroxine* have been used to lower triglyceride and LDL cholesterol, respectively, in the past. However, these drugs have each been associated with unexplained excess death rates in clinical trials. Clofibrate, however, may still be reserved for the treatment of Type III hyperlipidemia. Clinical trials are under way examining the efficacy and relative safety of several new lipid-lowering agents.

The Lipid Research Clinics Coronary Primary Prevention Trial and other smaller trials have shown that pharmacologic lowering of cholesterol levels in patients with moderate to high elevations of cholesterol can result in a significant decrease in CHD mortality. Thus it is worthwhile to work with patients to find the best-tolerated drug and to positively reinforce efforts to change the diet.

Comment

Skills in both nutritional intervention to control high cholesterol levels and in the use of pharmacologic regimens will become increasingly necessary for the practicing physician as the National Cholesterol Education Program begins to target cholesterol awareness campaigns to the American public. Physicians can respond by availing themselves of both local and national educational programs on lipid management and by identifying referral resources for assisting with complex "lifestyle" interventions.

References

1. Weshler, A.; Levine, S.; Idelson, R.; *et al.* "The Physicians' Role in Health Promotion—A Survey of Primary Care Practitioners." *N Engl J Med* 308(1983):97–100.
2. "Lowering Blood Cholesterol to Prevent Heart Disease: Consensus Conference Statement." *JAMA* 253(1985):2080–86.
3. Schaefer, E. and Levy, R. "Pathogenesis and Management of Lipoprotein Disorders." *N Engl J Med* 312(1985):1300–10.
4. Connor, W. and Connor, S. "The Dietary Prevention and Treatment of Coronary Heart Disease," In Connor, W. and Bristow, J. (eds). *Coronary Heart Disease: Prevention, Complications and Treatment.* Philadelphia: J.B. Lippincott, 1985.

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Today's Psychiatry

Bulimia and Mood Disorders

ARNOLD ANDERSEN MD

A major controversy in the literature today regarding eating disorders is whether to view the associated mood change as a consequence or a cause of the eating disorders. A book, *New Hope for Binge Eaters*, suggests that eating disorders are a kind of affective disorder and are best treated by antidepressants. The literature from Great Britain and other places reminds us that chronic starvation or binge/purge behavior leads to depressive affect for understandable reasons that do not require the invocation of a predisposing mood disorder. This controversy is in many ways like the story of the blindman and the elephant, both sets of observations are genuinely made but on different parts of the whole population.

Looking at bulimia for the moment, it appears to us, based on almost 500 consecutive consultations, that the most common reason for low mood in a bulimic patient is that the individual is out of control, demoralized, and feeling ineffective about interrupting his/her behavior. Some physiological alterations may further the lowered mood. A fair number of patients have demonstrated, however, that their binge behavior is a temporary effective way to self-regulate dysphoric moods. The dysphoric moods may come from a variety of sources including life events, features of temperament, psychodynamic conflicts, and affective disorder. We have found a fair number of bipolar II disorders as well as many recurrent depressive illnesses, dysthymic disorders, and cyclothymic personalities.

The best answer to the question of which comes first, mood disorder or eating disorder, is neither: both play an important role in the genesis and maintenance of these disorders. The DSM III definition of bulimia requires a demoralized, depressed state as a consequence of the eating behavior for a diagnosis to be made. Only by taking an extended history and sometimes by using standardized instruments (that is, SADS) can the lifetime history of depressive illness in the patient with the eating disorder be appreciated. Binge eating to control disphoric moods is akin to taking a drug fix to temporarily help a low mood. It is partially and temporarily effective but just enough so to perpetuate the behavior. When a patient is first relieved of a dysphoric mood by a binge and then faced with the fear of fatness basic to the anorectic psychopathology, the binge or purge sequence becomes firmly established. A temporarily effective solution then becomes the cause of another disquieting disorder.

These observations strongly suggest that eating disorders should be seen as a part of a spectrum of disorders with restrained eating and constant dieting on one end and severe anorexia nervosa or bulimia at the other end. The underlying features are the preoccupation with food and weight, the desire to become thinner even when normal or low in weight, and the fear of fatness leading to the pursuit of thinness as a way to solve fundamental issues and developmental relationships.

Should all patients with bulimia be given antidepressants? Based on our studies at Johns Hopkins, the answer is that many individuals clearly should be treated, but certainly not all. Effective methods using cognitive behavioral treatments have been demonstrated to work in a large percentage of individuals.

Patients whose mood remains low even when binge/purge behavior has been interrupted and patients with strong family histories of affective disorders should, in our opinion, be considered for antidepressants if they have bulimia. A case-by-case decision now makes the most sense with the future practice depending on empirical studies in progress. Each month we see consultations where the patient, on documented therapeutic ranges of various antidepressants, is still binging and purging, and we also find good outcome in many without treatment. The mediating factors of neurochemical, especially neurotransmitter, variables continue to be studied. Until some diagnostic tests are available on who would benefit, we need to appreciate the fact that mood disorder is an integral part of many bulimic patients, but the cause-and-effect relationships vary from person to person.

A more subtle kind of depressive affect may occur. This involves the uncovering of depressive affect in patients who have been binging and purging as a way to deal with issues in personality development, but who have not been otherwise noticeably low in mood. Therapy may uncover depression as the bulimic or anorexic behavior is interrupted. Sometimes patients may have alternating episodes of eating disorder and mood disorder because of a common underlying genetic factor of families with a high incidence of mood disorder. Alcoholism also figures prominantly in both bulimic and mood disorder patients.

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

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Maryland Oncology Newsletter

Monoclonal Antibodies

Cancer is a clonal expansion of a cell that has undergone malignant transformation. However, antigens carried by the cancer clone do not always differ significantly from those in normal cells. Most cancer antigens are modifications of molecules found in normal cells and are referred to as tumor-associated antigens rather than tumor-specific ones. Therefore, antibodies against antigens in cancer cells do not always distinguish neoplastic from nonneoplastic cells.

It is well known that myeloma produces large amounts of immunoglobulins. To make a hybridoma that can produce monoclonal antibodies, mouse myeloma cells with genes for indefinite proliferation are fused with B-lymphocytes from an animal immunized against a specific tumor antigen. B-lymphocytes have the genetic information to produce an antibody that is very specific against the antigen. Products of hybridomas are monocolonal and monospecific, that is, they react with one antigen. These can be purified and produced in large amounts over a long period.

Monoclonal antibodies are found to have two significant characteristics: first, they are very specific in identifying and binding to their antigen. Second, they cannot singly lyse or destroy their target, that is, tumor cells. Therefore, they are utilized in immune diagnosis with excellent results.

Can these monoclonal antibodies be used in cancer treatment? Most of the antineoplastic drugs are nonselective and attack fast-growing cells whether these are malignant or nonmalignant. Monoclonal antibodies are more specific, and can be coupled or conjugated with chemotherapeutic agents (such as methotrexate), toxins (such as ricin), radionuclide, or liposome to carry any of these to the target cells. Ricin is one of the ribosomal inhibiting proteins being investigated as a monoclonal antibody conjugate partner. While ricin α-chain has toxic potency to the cell, β-chain mediates cell binding. Tumor cell antigens and antibody receptors move between coated pits on the cell surface and the cell interior. The cell surface receptor and the immunotoxin, once bound, are moved inside the cell. The immunotoxin and the antibody are separated from the receptor by pH changes in the cell; the antibody and the immunotoxin are kept and stored in the lysosome and the receptor goes back to the surface.

The therapeutic problem is how to get the toxin out of the lysosome storage. Also, can we get a high enough concentration of these conjugates in the tumor cell to cause an antitumor effect, and how much conjugate can we give without systemic toxicity?

Another problem is the uptake of the monoclonal antibodies and their conjugate by the free-circulating tumor antigen in the circulation before reaching the tumor. Plasmapheresis has been suggested for use in the adjuvant situation when all circulating immunocomplexes are at their lowest levels.

Still another unresolved problem is the high antigenic heterogeneity among and within tumors. Therefore, therapy may require many different monoclonal antibodies, perhaps with panels of monoclonal antibodies to individualize therapy for each tumor.

Despite the power of the immune system in rejecting transplanted organs, it is doubtful whether the same system can eliminate large tumor masses. Therefore, it is expected that such immunotherapeutic approaches will be used in conjunction with other therapy, since the tumor burden must be reduced before an immune system can be manipulated.

E. GEORGE ELIAS MD
University of Maryland, Surgical Oncology Program

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One Minute with Diabetes

Doctor, Why did the Motor Vehicle Administration want to know about my diabetes when I applied for the renewal of my driver's license?

The medical profession and the individual motor vehicle operator play an important role in helping the Motor Vehicle Administration decide whether to grant or deny the right to operate a motor vehicle to persons with medical problems.

All diabetic patients applying for a vehicle operator's license are asked to acknowledge that they have diabetes. They are referred to the medical advisory board of the Motor Vehicle Administration for a recommendation as to their capability of driving as far as their diabetes is concerned. The board makes a recommendation, in each case, to the Commissioner of Motor Vehicles who usually follows that advice.

Between July 1, 1984 and June 30, 1985 there were 687 applicants who acknowledged having diabetes. When these persons were reviewed by the medical advisory board 419 were recommended for approval and 268 were withheld pending receipt of further information.

Maryland has a population of over 4,000,000; assuming that 6 percent have diabetes mellitus, there are approximately 240,000 diabetic persons in the state. If 25 percent of the population have a motor vehicle operator's license it is probable that 60,000 of the licensees in Maryland have diabetes mellitus. Since registration reveals 687 diabetics patients in one year and reregistration is required every fourth year about 2,800 are registered with the Motor Vehicle Administration. This would imply that less than one in twenty diabetic patients in the state admit to their medical problem.

The purpose of registering persons with medical problems with the Motor Vehicle Administration is not punitive but to encourage safer driving and better diabetic care through education and improved control. Diabetic patients should be instructed in the following:

1. To eat meals regularly and not to skip meals.
2. To drive moderate distances at one time and to stop if fatigued.
3. Not to mix alcohol with sulfonylurea drugs or insulin.
4. To carry some form of carbohydrate with them at all times in case hypoglycemia occurs on the highway.
5. To treat hypoglycemia immediately.
6. To carry identification in case of an accident and unconsciousness should they be taken to an emergency facility.

When an applicant for a motor vehicle license makes a false statement about a medical problem he/she may place his/her liability insurance in jeopardy, resulting in considerable financial loss in case of an accident.

Physicians have a responsibility to urge patients to be factual about any medical problem when applying for licensure and to encourage the best possible care at all times to minimize the possibility of an accident.

I know of no case where a patient with diabetes mellitus was restricted from operating a motor vehicle when his/her condition warranted a license.

De WITT E. De LAWTER **MD**
Editor

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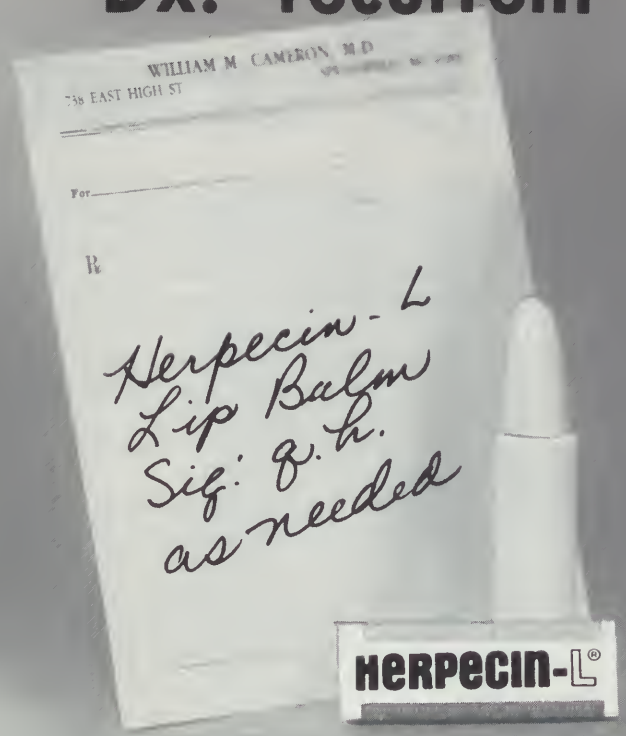
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Members in the News

Maher W. Ishak MD, a general surgeon on the staff of Harford Memorial Hospital, recently was elected President of the Hospital's Medical Staff. As president, Dr. Ishak will oversee the 147-member medical staff at the Havre de Grace hospital and will become a member of the hospital's board of directors. Dr. Ishak has been associated with Harford Memorial Hospital since he was granted staff privileges in 1966.

He received his premedical education at St. Joseph College in Cairo, Egypt and his medical degree from Cairo University in El Aimi, Egypt. Dr. Ishak completed internships at Cairo University Hospital and Westchester County Medical Center and School (NY) and surgical residencies at both Westchester and Perry Point Veterans Administration Hospital (MD), where he was the chief surgical resident.

Other recently elected officers of the Harford Memorial Hospital Medical Staff were: **Henry H. Kwah** MD, Vice-President, and **Vincent M. Osteria** MD, Secretary/Treasurer.

• • •

Stanley A. Klatsky MD was elected president of the American Society for Aesthetic Plastic Surgery during its 19th Annual Meeting. He is chief of plastic surgery at Baltimore County General Hospital, has been an assistant professor of plastic surgery at Johns Hopkins University Medical School since 1972, and has a private practice in Baltimore.

Dr. Klatsky received his undergraduate and medical degrees from the University of Maryland and did general surgery residence at Sinai Hospital, Baltimore. He completed his plastic surgery residency at Columbia Presbyterian Medical Center, New York City.

Arthur Kaufman MD is serving as the Medical Director of a project in charge of Quality Assessment/Risk Appraisal Reviews at 168 military medical facilities worldwide. The system is called Peer Review of Military Patient Treatment (PROMPT). Under a Department of Defense Contract, the Commission on Professional and Hospital Activities (CPHA) has employed through its subcontractor Forensic Medical Advisory Service (FMAS), Rockville, a highly qualified team of civilian medical records professionals to maximize consistency and reliability in data collection.

• • •

Jose Martinez MD, Director of the Department of Medical Affairs of CareFirst, has assumed the post of President of the American College of Nuclear Physicians. The national medical society, headquartered in Washington, DC, has more than 1,150 members throughout the United States, and draws its membership from board certified physicians and scientists primarily involved in the practice of Nuclear Medicine.

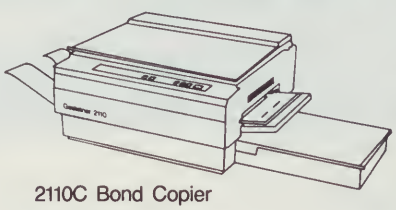
A native of Alexandria, Egypt, Dr. Martinez has been in the USA since 1958. Following residency training in Internal Medicine at Church Hospital and a Fellowship in Internal and Nuclear Medicine at Johns Hopkins University and Hospital, Dr. Martinez has practiced Internal and Nuclear medicine since 1965. He is concurrently Chief of the Section of Nuclear Medicine at Fallston General Hospital.

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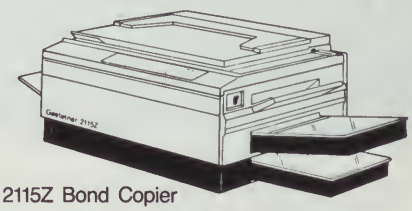
As in previous years, **John B. Umhau, Jr.,** MD was volunteer overseer for health services during this year's National 4-H Conference held in Chevy Chase.

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The Library Page

Heritage and Books

My favorite story from Med-Chi's history deals with the relationships between two of the Faculty's founders: Upton Scott, MD and Charles Alexander Warfield MB. Upton Scott was an Irishman. He received an MD from the University of Glasgow in 1753. He held a commission in the British army as a surgeon's mate and became General Wolfe's personal physician. He later emigrated from England to Maryland along with the newly appointed Governor Horatio Sharpe. Over the next several years he assumed several political offices including an appointment as Sheriff of Anne Arundel County, Secretary of the Upper House of the Colonial Assembly, and Secretary to Governor Eden, Maryland's last British executive. A royalist, Dr. Scott returned to Britain with Governor Eden in 1776.

Charles Warfield was born in 1751 in what now is Howard County but at the time was a part of Anne Arundel County. He lived and practiced at Elk Ridge. As early as 1773, he was publically espousing independence for the colonies from Britain. On the evening of October 19, 1774, Dr. Warfield gathered his neighbors and led them to Annapolis where the ship Peggy Stewart recently had docked with a cargo of tea. The crowd roused the ship's owner, took him to the harbor, and forced him to set fire to the vessel and its cargo. Dr. Warfield served as First Major of the Elk Ridge Battalion in the Colonial Army. He also engaged in the manufacture of saltpeter, an essential for keeping the Colonial forces supplied with gunpowder.

After the war ended, Dr. Warfield was appointed Judge of the Anne Arundel County Court. About the same time, Dr. Scott decided to return to Annapolis, where, in an act of magnanimity, the government restored his large house on Church Street to him and his family.

It seems an anomaly that these two individuals with such widely different political orientations would, through joint efforts, be instrumental in establishing the Medical and Chirurgical Faculty and in guiding it through its early formative years. As Sheriff of Anne Arundel County, Dr. Scott sought Warfield's arrest following the Annapolis Tea Party. Had Dr. Warfield been caught, Dr. Scott would have served as jailer and perhaps even executioner. Still, at the first annual meeting of the Medical and Chirurgical Faculty in Annapolis on June 3, 1799, Dr. Warfield joined with the ninty-nine other physician founders to unanimously elect Dr. Scott the first president. For me this story typifies the spirit of open-mindedness, understanding, and cooperation that has characterized the Faculty throughout its 186 year history, has held it together, and has accounted for its success.

Medical and Chirurgical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian.

The Faculty Library's rare book and historical collection is a physical link between today's member physicians and the heritage of the founders and past members. We are extremely fortunate to have Dr. Scott's library, which has been kept in a single collection. It includes the medical texts Dr. Scott used while a student in Glasgow. It also includes the manuals he carried as a medical officer in the British Army. The texts from later years demonstrate Dr. Scott's concern to keep himself current with developments in medical practice. The quality and quantity of Dr. Scott's professional reading account, at least in part, for the fact that Dr. Scott's opinions and consultations were widely sought by his fellow physicians. This collection of books also helps us understand how Dr. Scott came to be unanimously elected as the Faculty's first president. He served two terms, and only his own insistance that he was old and wearing out prevented the Society from electing him to a third term. He died in 1803.

The Faculty Library's collection of Dr. Scott's books is a fine example of the professional library of an eighteenth century physician practicing in the colonies. We can look at historical collections in other medical libraries to examine what was being written and published during Dr. Scott's lifetime. But what we have in Dr. Scott's collection is a sample of what actually was being read and used by practicing physicians in the colonies.

Dr. Warfield held a variety of offices in the Faculty. In 1812, he was appointed President of the Faculty's College of Medicine of Maryland (now the University of Maryland Medical School). He died a year later in 1813. The Faculty Library also has a good number of Dr. Warfield's books. Unfortunately, Dr. Warfield's library was not kept intact. The items we do have were donated by a variety of physicians over the past 150 years. When looking through books in the collection, one frequently comes across Dr. Warfield's ownership signature, sometimes followed by the signature of one of his sons. Both Gustavus and Peregrine Warfield became physicians and active members of the Faculty.

These books from Dr. Scott and Dr. Warfield are a very small sample of the thousands of books in your Faculty Library's historical collection. Still, they are in many ways representative of the kind of materials in the collection and of why this collection is important to the Faculty. In looking through books in the collection, one can find bookplates and ownership signatures from most of the Faculty's 101 founding physicians. One also can find books owned and used by well-known physicians from every part of the Faculty's history.

There is another small segment of books in the historical collection that significantly predate the founding of the Faculty. Many of these items are great classics, such as the 1543 first edition of Vesalius and our early editions of Harvey's work on the circulation

of the blood. All these rare and valuable items came to the Faculty as a result of great physicians like William Osler MD who scoured the bookshops of Europe for great medical classics for the Faculty Library.

These classics, too, are an important part of your heritage as modern physicians. The Faculty bears the title "Faculty" because its founders saw it as a learned body devoted to promoting and advancing medical and chirurgical knowledge. This organization was to be far more than a trade society. Dr. Osler found and purchased a Vesalius for the Faculty at his own expense so that all the future members would have the opportunity to see and handle the book in which the art and the science of medicine met.

In discussions with our physicians about the Faculty's historical collection and its value, I often find people astounded that books that old are not worth more than what I say they are. On the other hand, there are some who are surprised that the Faculty continues to hold items of such great value. Both reactions misrepresent the importance of the collection for the Faculty. The Faculty does not own and maintain these items as a monetary investment. That was never the intent of the past members and officers who gave them to us. The books in the historical collection are the link of today's physicians with their past. The Faculty keeps these wonderful books and exhibits them with pride as an essential part of the Faculty's identity and a sign for all future members of the Faculty's purpose.

JOSEPH E. JENSEN
Library Director

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during April 1986.

	No. of Citations
1. Adverse effects of beryllium	30
2. Alcoholism, substance dependence, and ambulatory care	17
3. Drug therapy for obsessive-compulsive disorders of children	13
4. Facial hemiatrophy	22
5. Hypoglycemia and patient education	33
6. Ionizing radiation and lymphoma	39
7. Malpractice, consumer satisfaction, and public opinion	35
8. Psychological autopsy	24
9. Talus fractures and necrosis	11
10. Treatment of pityriasis rubra pilaris	34

If you would like a copy of one of these searches or a search run on any other biomedical topic, call or write the library.

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Auxiliary

The Muse Heritage

I was asked by our state past president, Kathy Karpers, to serve as Councilor to the Southern Medical Association Auxiliary and, since I was familiar with the goals of the organization, began searching for projects for Doctors' Day and the Research and Romance of Medicine. The Research and Romance of Medicine project was established to encourage and guide us in the preservation of our Medical Heritage. I was fortunate to know the Muse Family, and, through contact with Dr. and Mrs. William Travers Muse, to be able to compile a history of Dr. Muse's grandfather, Dr. Josiah Alexander Bayly Muse.

Over the span of one hundred years the Muse family produced ten physicians, who not only served in the field of medicine but also in the political arena. Our state has benefited over the past century in medicine and politics by the service of this family, deeply entwined in the history of our state. The family members have toiled unceasingly to benefit those involved in medicine and law. It was difficult to choose one person and his life to study given the extensive family history. My choice was made after reading the original letters and documents concerning Dr. Josiah Alexander Bayly Muse. Although the following history is brief, if you had the chance to read the letters written by Dr. Muse, you would have found him to be a caring and loving husband, father, and physician.

Josiah Alexander Bayly Muse was born in Cambridge, Maryland, on July 3, 1835. He attended the Cambridge Academy for his early education. Completing his years of study there he became a boarding student at St. Timothy's Hall in Catonsville. After graduation Josiah was still undecided about his future endeavors, and he decided to travel around the United States. He resided for a short time in San Francisco.

Josiah then returned to Maryland and entered the University of Maryland Medical School. During the time of his matriculation at medical school he was invited to join the Rush Club, an Honor Society with the name derived from Dr. Benjamin Rush, a Revolutionary War physician. Outstanding scholars from the junior and senior years of medical school were invited to join this society. On February 29, 1860 Josiah was notified that he had successfully completed medical school, and he established a practice for a brief period in Baltimore City.

After practicing in Baltimore, Josiah decided to travel to New Orleans, Louisiana. During his stay in New Orleans, he met and married Johanna O'Connor. The wedding was held on June 20, 1861. Josiah became a Contract Surgeon for the United States during the Civil War. After serving for a time in New Orleans he was stationed at McKim's U.S. General Hospital in Baltimore. Later on Josiah was stationed at Camp Parole, Maryland.

When the war activities ceased, Josiah and his family journeyed to Martinsburg, West Virginia, where he



Josiah Alexander Bayly Muse MD

The Muses of Maryland

Year of Graduation from Med School

James Augustus Muse MD	1834
William Henry Muse MD	1836
Joseph Ennalls Muse MD	1838
Josiah Alexander Bayly Muse MD	1860
Bernard Purcell Muse MD	1888
Wilford Celestine Muse MD	1890
Joseph Ennalls Muse MD	1898
Alexander Eutace Muse MD	1902
Joseph Ennalls Muse MD	1937
William Travers Muse MD	1940

Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland. Mrs. Nancy Howell, President; Mrs. Helen M. Reichel, Editor.

Future Med-Chi Meetings

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September 14–17
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Chateau Frontenac
Quebec City

1987 Annual
April 29, 30, May 1
Omni International-Baltimore

1987 Semiannual
Mid-September
Maui, Hawaii

1988 Semiannual
September 14–18
Bermuda

established his practice. He was appointed examining Surgeon for Disabilities and Pensions for Civil War injuries. Josiah and Johanna had three sons, and their sons became physicians. Josiah continued to practice in Martinsburg until his untimely death on March 31, 1876, at 41 years of age. His three sons returned to Maryland to serve the community in the field of medicine and politics.

The Story of the Muse Family and their medical tradition in Maryland ended with the presentation of this history by Josiah's grandson, Dr. William Travers Muse. There is at this time no Muse attending medical school in Maryland. It is the end of an era. The letters and articles concerning the life of Dr. Josiah Alexander Bayly Muse and his family were complete and extensive.

The Southern Medical Association meeting was held in Orlando, Florida in November 1985. The Research and Romance project was presented for judging at this time. The display included the album, a quilted banner, and an explanation of the family crest. For this presentation the State of Maryland won the Best Statewide Exhibit Award.

VIRGINIA M. LEVICKAS, **Councilor**

• • •

Car Seats Given

On Doctor's Day, March 30, 1986, a baby's car seat was given to the first baby born at Greater Baltimore Medical Center, Franklin Square Hospital, and St. Joseph Hospital. These car seats were donated by the Auxiliary to the Baltimore County Medical Association. Doctor's Day is a tradition started many years ago in Georgia to honor physicians for their dedication to the health and well-being of their communities. The Auxiliary is pleased to celebrate this day with a project to share with the community. The car seat project was co-chaired by Mrs. Robert Lisle and Mrs. Benjamin Yorkoff. The Auxiliary has 140 members, all physicans' wives, and the car seat program is one of its community service projects.



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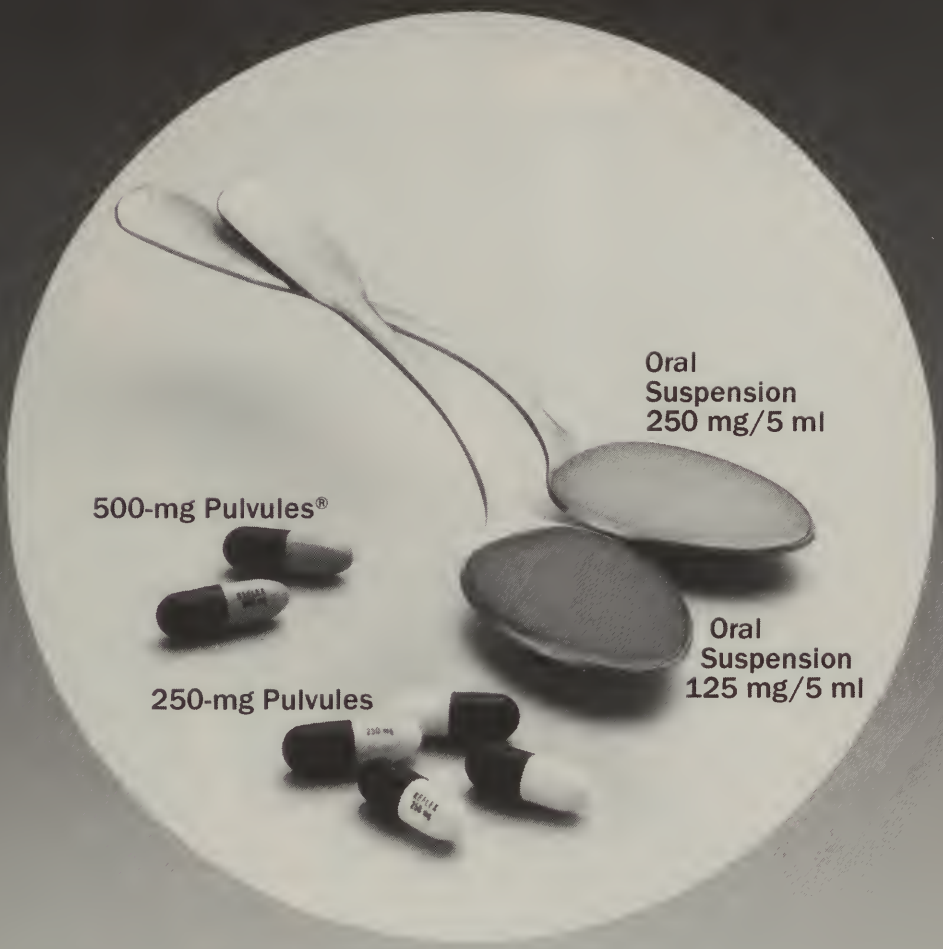
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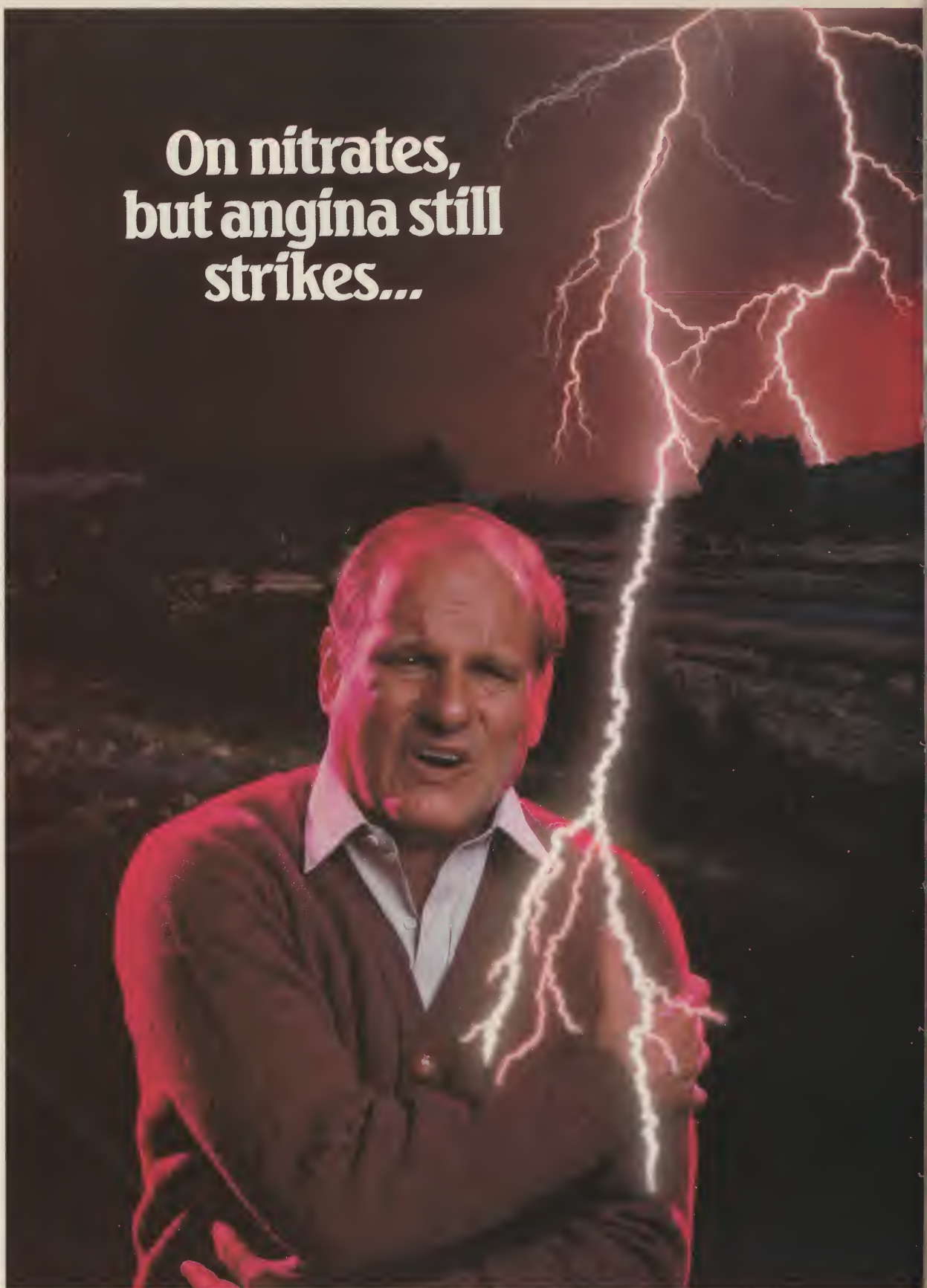
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strikes...

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Cardiovascular contraindications to the use of Isoptin are similar to those of beta blockers: severe left ventricular dysfunction, hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no artificial pacemaker is present) and second- or third-degree AV block.

So, the next time a nitrate is not enough, add Isoptin... for more comprehensive antianginal protection without side effects which may cramp an active life style.



ISOPTIN. Added antianginal protection without beta-blocker side effects.

Please see brief summary on following page.

ISOPTIN®
(verapamil HCl/Knoll)
80 mg and 120 mg scored, film-coated tablets

Contraindications: Severe left ventricular dysfunction (see *Warnings),* hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.)* Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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Tumors and Humors: Current Status of the Immunology of Cancer

GLENN W. GEELHOED MD

To strike a balanced perspective on immunology in practical application to cancer patients, we review the immune response and its aberrations and then focus on how the fundamentals of the immune response may be harnessed for patients' benefit. In tailoring treatment programs to comport with and enhance patients' resistance rather than to buck the tide of their defense mechanisms, we focus on the three developing roles of immunodiagnosis, immunoevaluation, and immunotherapy.

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Headlines in newspapers and magazines (and even some professional journals) announce some breakthrough in immunologic methodology with the thinly veiled promise that the control of cancer is just around the corner. Patients come to you having read the same news releases with high expectations for help with cancer through these new powers to understand and manipulate immunology in man. "See, it says right here in black and white that there are 'killer cells' and antibodies to my cancer. Why can't you use these new methods instead of this painful operation, this long-and-drawn-out radiation, and these dangerous drugs, all of which are making me sicker?"

Despite the headlines reporting *in vitro* possibilities, preliminary reporting of small series, and projecting a promising future for all manner of immunologic methods, you are treating cancer by established and conventional techniques rather than by those reported with a gush of enthusiasm that your patients inevitably find in their search for hope. You know that clinical immunology is long on promise but rather short on current delivery. Should you dismiss it all together? "Let them work the bugs out of their systems and come up with something practical, and then I will bother to learn what shakes out of their pipe dreams as real." Or should you become an enthusiast for some of these "front-line" techniques and participate in clinical trials of often unproved treatments? "I think I will call and find out how much BCG to give and how often and where to each of my patients with cancer, since it probably won't hurt much, and certainly I will try anything that could help."

In our office practices most of us are somewhere between nihilism and activism, usually trying to err on the side of caution, reserving our optimism for patient support and our realism for treatment methods. To head off the disappointment of unfulfilled promises, we review the current status of immunology and cancer from the perspective of what it does, what it can do, and what it might deliver. Rather than ask it to do too much and to substitute for many of the treatment methods sometimes judged unsatisfactory because of the side effects they carry with them, we will stress the concept of *adjunctive* therapy.

One frequently hears the term "adjuvant therapy" used when "adjunctive" is meant. "Adjuvant" has a specific definition in immunology; as in the use of "Freund's adjuvant" this use of the term means a material that enhances the antigenicity of another substance. When "combined modalities" is meant, the term adjunctive should be used, but the term usually means we would like to add something to the primary treatment, that is, operation, radiation, or chemotherapy. We might attempt to turn this concept around: any treatment, if it is to be effective, must be an adjunct to the patient's innate ability to resist the spread of tumor. We continually must be aware that many of the primary treatments for cancer have an impact on the immunoresponsiveness of the patient that is large in magnitude and negative in sign.

The Immune Response

The immune response is a necessary evil. How necessary it is becomes evident when there is none. How evil it is becomes apparent when it overreacts or interferes with our well-intentioned treatment plans. Often the immune response does not recognize the best intentions of our actions as therapists. As seen in Figure 1 (next page), if the therapist's primary objective is treatment of autoimmune disease, transplantation, allergy or atopy, the goal is immunosuppression to treat rejection and induce tolerance. A lesser activity or modification of the immune response is the therapeutic goal, and any overactivity of the immune response or that directed contrary to therapeutic objective is termed disease.

However, the same immune response may be good if the objective is to induce the body to repel infectious or malignant invaders or to enhance surveillance to assure health in homeostasis. The equal and opposite effect is true in this instance, when disease is the state of a suppressed immune response, the difference being only in the intent of therapy. In each instance the immune response is consistent, but the therapeutic objectives might be quite different in intervention. One might say transplantation immunology and tumor immunology are flip sides of the same coin; the biology of the immune response in each case is far more consistent

than therapeutic intervention and its effect, although propelled by quite different treatment objectives.

Often the immune response in the *patient* can be enhanced or suppressed by the same drugs selected for their effect against the *cancer*. For example, good nutrition is a necessary first step in an adequate immune response. This nutrition may be interrupted by an operation designed to remove the tumor or by drugs that impair utilization of food stuffs even if the patient is eating. Antibiotics usually are selected for their bactericidal action against the microbe that has been cultured and proved sensitive to the drug. It is often overlooked that the one organism sure to realize the effect of the drug is the patient, the macro organism that will experience the effect of the drug whether or not the micro organism is sensitive to it.

Some of the first-line drugs used now for transplant immunosuppression started life as antibiotics! It is widely known that cytotoxic chemotherapy given to suppress the growth of rapidly dividing cells does not specifically effect only the cancer but all rapidly growing cells of the body, including the bone marrow and epithelium of the gastrointestinal tract. Therefore, the patient may get the beneficial effect of reduced tumor burden simultaneous with marrow suppression and injury to epithelial barriers from the same drug. The immune response will follow its own rules with respect to the administration of hormones, drugs, surgical or radiation therapy, and these modalities must be selected intelligently to minimize the impact on the patient and maximize therapeutic objectives on the tumor.

Humoral immunity in man is the part of the immune response characterized by antibody production and immediate hypersensitivity. Specific proteins are "recognized" through processing in the body by the afferent limb of the immune response. These antigenic proteins are foreign to the body (or made to appear so) and are taken in through the macrophages that carry the antigen through the reticuloendothelial system. After the processing of these antigens in the afferent limb, one of two predominant responses is seen in the efferent limb. This "B-cell" line results in antibody production by plasma cells. The antibodies are gamma globulin proteins, and this means that the immune response may be transferred by serum from the B-cell efferent line. These antibodies are useful in homeostasis in complexing antigen that may be introduced into the patient at the next experience with this antigen, particularly if the patient has been "immunized" by repeated exposure to the antigen and the anamnestic response is

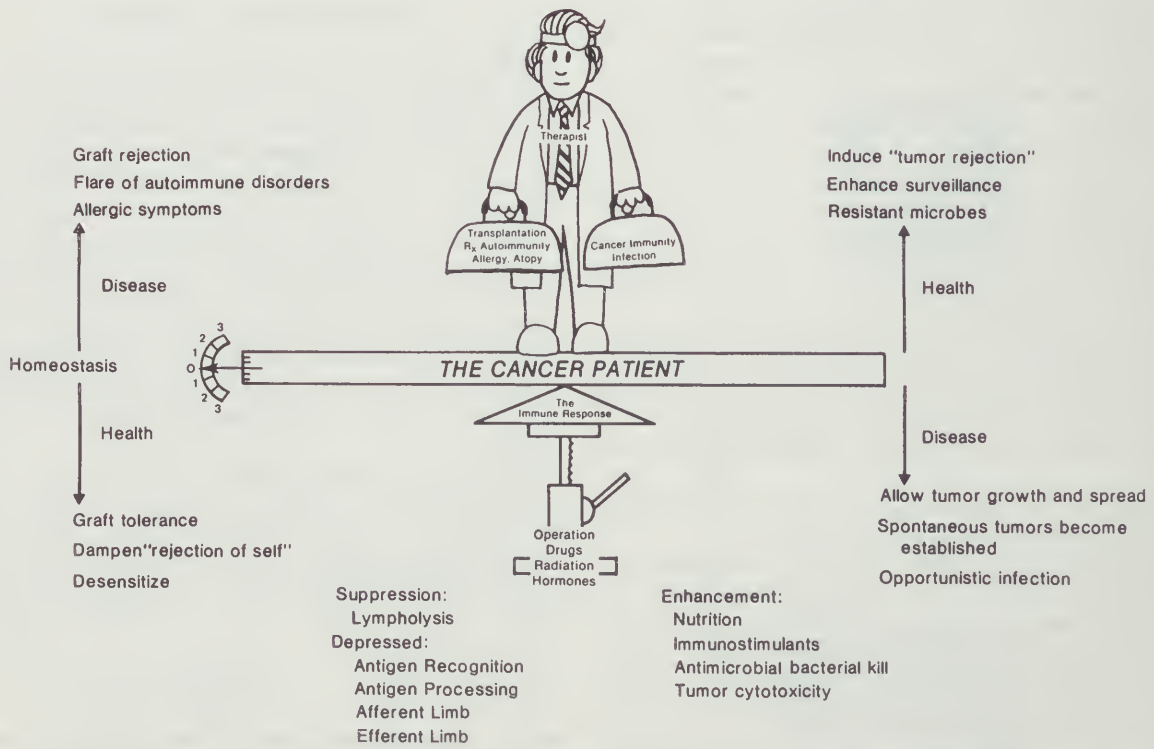


Figure 1. Therapeutic objective might be quite different, although the immune response is consistent under the influence of these interventions with opposite therapeutic intent.

amplified. However, this same antibody-mediated immediate hypersensitivity includes anaphylaxis, allergy, and some autoimmune disorders.

Antibodies are globulins that consist of heavy chains and light chains of protein bound together in couplets. These Y-shaped globulin antibodies have specificity programmed into the open end of the Y to react to certain antigens. A single plasma cell is "dedicated" to produce a globulin preprogrammed to act as one antibody to a specific antigen. The secondary structure of these globulins can be in monomers (called gamma globulin). Two of these gamma globulins may duplex upon a small protein called a "secretory piece," found in secretions, or the gamma globulins may cluster, meeting at their heavy chain ends in a structure known as macroglobulin.[1] These three types of globulin structures (if they are programmed as specific antibodies) are then known as "immunoglobulins," and the three are given acronym initials: gamma globulin is IgG, the dimer joined by a secretory piece is IgA, and the macroglobulin is IgM.

These immunoglobulins can be measured and can be useful sometimes as markers of an underlying illness. In certain disease states, excess quantities of these globulins are produced (as in Waldenstrom's macroglobulinemia), and in some diseases an overproduction of the light or heavy chains might be measured particularly easily when they are excreted in the urine (as the Bence-Jones protein test for multiple myeloma). Both excess and deficiency diseases can result from disorders of globulin synthesis.

Mediator Substances

Cellular immunity also has mediator molecules, but they are not globulins and hence not antibodies. These mediator substances are proteins called "lymphokines." The second side of the efferent limb of the immune response is called the "T-cell" line, and lymphokines are the soluble nonantibody T-cell products. More than two dozen lymphokines have been identified[2] and given names that often come from the assay system that revealed them, such as migration inhibition factor, lymphocytotoxins, blastogenic (mitrogenic) factor, and transfer factor.

There are several differences between the two major pathways of the efferent limb of the immune response as depicted in Figure 2. The lymphoreticular cell of origin for humoral immunity is the B-cell line, and for cellular immunity it is the thymus-derived or T-cell line. Humoral immunity is responsible for immediate hypersensitivity reactions, whereas cellular immunity takes the form of delayed hypersensitivity. The mediator molecules for humoral immunity are the previously discussed immunoglobulins, IgG, IgA, and IgM. For cellular immunity these mediator molecules are the lymphokines, which are nonglobulin proteins. Lymphokines are soluble, and macroglobulins may be insoluble under certain circumstances (which is the physical chemistry principle behind "salting out" globulins from a protein suspension that includes albumin and other proteins). Humoral immunity may be transferred by a cell-free serum, whereas cellular immunity is transferred only by T-cells or fractions of the T-cells. Complement activation mediates humoral immunity, whereas for cellular immunity direct T-cell contact or the lymphocytotoxin products accomplish the effect of this side of the efferent limb. For practical purposes, most cancer immunity is seen in the cell-mediated immune response.

Immunocompetence begins very early in embryonic life when an individual first expresses identity through this immunologic declaration of "self." This immunocompetence is a vital homeostatic mechanism to detect and repel invasion from viral or microbial invaders, to prevent development of groups of cells that have reflected their malignant transformation in the markers of new and hence "foreign" antigens, and to maintain

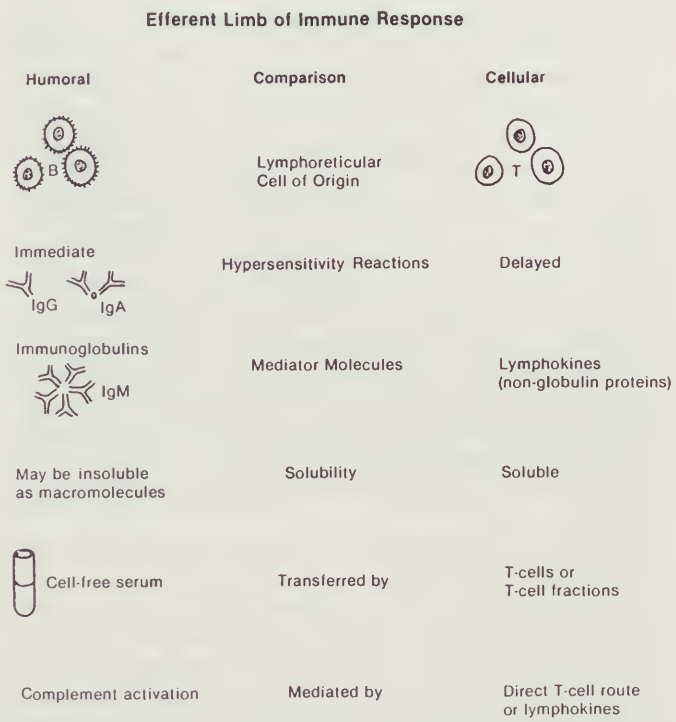


Figure 2. The two efferent limbs of the immune response have differences that can be measured by several methods but have a common effect in surveillance of foreign protein invasion and protection of self-identity.

and protect this identity throughout life despite superficial changes in the host. Aberrations and immune response may be both cause and result of human illness. Especially in cancer, illness is a stress of the self-identity and a utilization of both cellular and humoral efferent arms of the immune response in homeostasis. These responses may be modified (but not fundamentally changed) by severe stresses to the host such as trauma, critical illness, starvation, and shock.[3] Throughout this wide range of stresses, the patient may be able to "compensate"[4] through the mobilization of the immune response that follows quickly behind the neuroendocrine mechanisms of compensation. Without these immunologic capabilities, a patient is ill equipped to carry out a normal life.

However, as therapists we deliberately produce the same defects in the immune response for purposes of transplantation (through the use of our immunosuppressive drugs) or as a side effect of antimetabolite drug therapy given for cancer. Immunosuppression is an acquired paralysis of the immune response, generally nonspecific, and leaves the host vulnerable to implantation and establishment of foreign protein. Much attention directed at the immune response has been with the objective of "active" immunotherapy, with little recognition to the fact that every day in physicians' offices patients receive far more significant injury to the immune response than would be considered "inactivation" of a very specific compensatory defense.

Of particular interest to the physician treating cancer patients is the fate of patients born with immunodeficiency or those subjected to prolonged immunosuppressive treatment. Patients with combined immunodeficiency disorders are usually quickly victimized by the microbial environment into which they are born, but if they are isolated from an unsterile environment, they fall victim to cancer at 10,000 times the incidence in the general population. Patients who are on immunosuppression drugs for protection of a transplanted organ are subject to high infection risk from bacterial, viral, fungal, or protozan invaders; of equal note, they have 100 times the incidence of cancer seen in the general population that presumably has normal immunocompetence.

This link in each direction between cancer and immunodeficiency is evident to every practitioner caring for cancer patients. Few patients die of cancer, since patients with widely disseminated malignant disease usually fall victim to infection as a consequence of their tumor burden. There are a number of ways to prove this depressed cellular and humoral response in patients with disseminated cancer. The reverse is also true: patients with impaired humoral or cellular immune response have a much higher incidence of cancer. The association of cancer in immunodeficiency is strong, but the conclusion that one is cause and the other is effect is simplistic. In human patients, the effect of sporadic cancers on the immune response and vice versa are difficult to evaluate. In laboratory animals, inbred animal strains (syngeneic) have been employed to prove there are "tumor-specific transplant antigens" that are recognized as non-self by the host, and though weak in their antigenicity, may be enhanced to induce both cell-mediated and humoral immune responses against the tumor.

Why bother with the study of immunology if it can be proved that patients have demonstrable immune responses to tumors that are obviously overwhelming them? This paradox is called "concomitant immunity"—cancers may continue to grow and take over the host despite provable immunogenecity. The multiple potential solutions to this riddle are the subjects of tumor immunology in oncologic investigation. However, with a practical view to what immunology has offered thus far to the practicing physician, we might focus on three effective uses of cancer immunology: immunodiagnosis, immunoevaluation, and immunotherapy. It is possible a fourth area will become more prominent in the future: immunoprevention.

Immunodiagnosis

A valuable handle on any cancer can be obtained if the cancer is found to be associated with a "tumor marker." The ideal tumor marker is specific for a given type of tumor but is generally detectable in all patients who bear that tumor. The marker is absent in persons who do not have the tumor. It is transient, going away rapidly after the tumor is removed and returning when the tumor recurs. The marker could be a "proxy" for the tumor and could be treated as a measurable end point with the presumption the tumor also has been controlled.

There are no perfect markers, and immunologic markers are quite imprecise, contrary to their first claims for specificity and utility. Somewhat closer to ideal are hormone markers of some endocrine tumors. For example, one of two reasons that choriocarcinoma was one of the first human tumors to be controlled by chemotherapy is that it secreted a reliable tumor marker in the form of gonadotropin (HCG). The gonadotropin could be used as a rather reliable indicator of the presence or recurrence of disease, and treatment could be given accordingly. Of incidental interest to cancer immunology is the second reason it was susceptible to treatment is it was at least half "foreign" to the host, since there were fetal antigens as well as maternal antigens in the trophoblastic neoplasm.

Medullary thyroid carcinoma, a parafollicular cell neoplasm, secretes a marker, calcitonin. Although formerly thought to be specific for this neoplasm in thyroid, calcitonin has been found in other tissues and may have other physiologic functions in humans and in primates.[5] Nonetheless, this tumor marker is a very valuable diagnostic test since it can find neoplasm before it is clinically palpable or evident, even before thyroid scan evidence and sometimes before the true neoplasm has emerged, and it can detect "C-cell hyperplasia," a precursor to medullary thyroid cancer. For this reason, baseline and stimulated calcitonin values are a very valuable method of case finding for patients at high risk for hereditary medullary thyroid cancer.

Catecholamines may serve as a marker for pheochromocytoma and some of the neuroblastomas, and immunology is certainly of value in the revolutionary capability developed to find these endocrine tumor markers with incredible sensitivity and great specificity through radioimmunoassay. A wide variety of radioimmunoassays for hormones and other substances in the body have been an impetus to search for some further biochemical, isoenzyme, or tumor antigen markers of tumors that may be present before a cancer is clinically apparent. A number of antigens have been identified that seem to be associated with neoplasms with a frequency sufficient to warrant closer diagnostic evaluations. In comparing the endocrine tumor markers of Table 1, the immunologic tumor markers of Table 2 have been less specific.

For example, carcinoembryonic antigen (CEA) was previously thought to be present only in embryonic stages of development or in the reversion to these same genetic states by means of the derepression of malignant transformation. Adenocarcinoma of the gastrointestinal tract has a high frequency of carcinoembryonic antigen that can be identified in both tumor and the serum of patients bearing such tumors. However, CEA also is elevated in tumors of other body tissues, in a number of nonmalignant diseases, as well as (generally) in the serum of smokers. Alpha fetoprotein (AFP) is likewise a protein that may be detected in the serum that follows derepression in the reversion to more primitive cell genetics that occurs with neoplastic transformation. However, AFP also is identified in carcinomas outside the liver (with which it was formerly thought to be specifically associated) and nonmalignant diseases such as viral hepatitis and cirrhosis.

Immunologic tumor markers have proved to be less specific than the endocrine counterparts as indicators of occult neoplasm, and their use to date has been disappointing as a screening technique for case finding. However, they have proved useful in detecting recurrence before other clinical evidence following treatment

TUMOR MARKERS OR INDICATORS OF DISEASE
Endocrine

Tumor	Marker
Choriocarcinoma	Gonadotropin
Medullary Thyroid	Calcitonin
Parathyroid	Parathormone
Pheochromocytoma	Catecholamines
Insulinoma	Insulin
Adrenal Cortical Adenoma	Aldosterone
Non-Beta Islet Cell Pancreatic Tumor	Gastrin

Table 1. Hormones as tumor markers have a high utility in diagnostic case finding, facilitated by the development of highly sensitive and specific radioimmunoassay.

TUMOR MARKERS OR INDICATORS OF DISEASE
Immunologic

Tumor	Antigen	Report
Colon	Carcinoembryonic	Gold
Hepatoma	Alpha Fetoprotein	Abelev
Sarcoma	Sarcoma Antigen	Morton
Melanoma	Melanoma Antigen	Morton
Hodgkins	Lymphoma Antigen	Order
Lymphoma	CEA-like Antigen	Hollinshead
Breast	T-Globulin	Tal
Neovascularized Solid Tumors	Tumor Angfogenesis Factor	Folkman

Table 2. Immunologic tumor markers have been disappointing because of their lack of specificity for malignant disease that makes them unreliable for diagnostic screening, although they retain value as markers of treatment response that is useful in follow-up of patients with known cancers.

Table 3. Cancer ⇋ Immunodeficiency

1. Infants with congenital immunodeficiency states have 10,000-fold increase in cancer susceptibility if they survive infection risk.
2. Transplant recipients on long-term immunosuppressives have 100-fold increase in cancer susceptibility.
3. Both skin test and *in vitro* evidence of immune response to both autologous and homologous tumor extracts.
4. Cancer cachexia may convert skin test evidence of immunocompetence to anergy.
5. Good nutrition (e.g., hyperalimentation) may initiate tumor response in patient previously refractory to treatment.
6. Implied host response of histologic evidence of lymphocytic infiltration in regressing tumors.
7. Rare, but well-documented, spontaneous tumor regressions.

Table 3. There is a strong association—each way—cancer and immunodeficiency in human patients, adduced by multiple lines of evidence.



Figure 3. A positive response to skin testing by application of sensitizing and challenge doses of topical dinitrochlorobenzene (DNCB) means intact cellular immune response and predicts a favorable prognosis to cancer treatment.

of certain tumors and have been useful as indicators of treatment to help judge the effectiveness of drug, radiation, or surgical tumor reduction. In practical terms, it means that CEA determination should be obtained only on the patient known to have colon cancer as a helpful baseline for follow-up care of that patient rather than as a diagnostic aide to help find patients suspected of having colon cancer. At present, then, immunodiagnosis is best served by the application of immunology in radioimmunoassay; the most specific markers are endocrine, and highly sensitive immunologic marker assays are not specific enough to serve as screening techniques.

Immunoevaluation

A second major practical value in the management of the cancer patient makes use of immunologic monitoring methods in immunoevaluation. A mirror image of Table 3 would emphasize that the patient with good immunocompetence has a better ability to handle the challenge of his/her tumor. By checking the response of the cancer patient to standard recall antigens, an assay of delayed cutaneous hypersensitivity response often can predict how well the patient will resist the advance of the malignant disease or will respond to treatment. As seen in Figure 3, a sensitizing dose of dinitrochlorobenzine (DNCB) can be employed, and a later challenge dose illicits this positive DNCB response.[6] Most patients have been exposed to mumps or might have been known to have a positive tuberculin skin test; testing for these recall antigens will give a quicker indication of intact cellular immunity. Failure to react to these antigenic stimuli despite previous known sensitization is evidence of anergy in the patient, a very poor prognostic sign for cancer control. The usefulness of skin-test evidence of cell-mediated immunity has such clinical significance that some observers have said this evidence is the most important correlation with patient outcome.

Many other measures of patients immunoreactivity are available including phytohemagglutanin, lymphocyte stimulation, rosette-forming T-lympocyte assay, and various other *in vitro* tests. A number of these are useful in investigational settings, but, practically, the best correlation with the patient's immunocompetence is with the patient's nutritional and physiologic condition at the time the assays are performed. It is possible to find patients who do not react to skin test antigens, who perform poorly on other assays of immunocompetence, and who become reactive following intensive nutritional support program such as hyperalimentation.[8]

Nutritional assessment is a very important factor in the patient's immunoevaluation. It is the one step most easily measured in the practitioner's office, most di-

rectly correlated with the patient's status, and sometimes is amenable to correction by the primary physician. Critical care of patients with serious illness has been improved remarkably by biochemical screening and physiologic profile of the patients' reserves; of similar importance for the cancer patient will be the outpatient assessment of immunocompetence and nutritional status.

Immunotherapy

Immunotherapy may be the tip of the pyramid of the application of immunologic methods to the management of the cancer patient, and it has stirred up controversy. Some oncologists have raised hopes and others have denounced the application of specific cancer immunotherapy as premature. As with most cancer treatment programs, immunotherapy has been applied to the patient with advanced cancer, and such phase one trials often have been disappointing.

Active immunotherapy involves stimulation of the reticuloendothelial system with antigens from the patient's own tumor or cells for similar tumors of other patients (active specific immunotherapy), stimulation with adjuvants such as bacterial products of organisms like BCG or corynebacterium parvum (nonspecific active immunotherapy), or stimulation with a combination of tumor cells and adjuvants. In cases in which tumor cells are used, given the phenomenon of "concomitant immunity," live tumor cells are first inactivated to prevent their successful transplantation by radiation, for example. Treatment of tumor cells or extraction of tumor cell products may modify the tumor cell surfaces, enhancing their antigenicity or increasing the yield of subcellular tumor antigens for stimulation of the patient's own active immunoresponsiveness. A drawback of all forms of active immunotherapy is that they presume an intact immune response, and (as seen in Table 1) cancer often is associated with immunodeficiency as an effect, if not a cause.

Active specific immunotherapy with BCG and autologous radiated tumor cells is depicted in Figure 4. In this example, the mixture of immunostimulants is injected superficially into the skin to sensitize to the weak tumor cell antigens and the adjuvants injected in lymph node basins in groin and axilla. The hazards of this form of immunotherapy include fever and malaise from the systemic immunologic stimulation (generally pyrogenic), uncomfortable and unsightly local ulcers and sinuses, and even the possibility of "BCG-osis" in the immunocompromised patient, occurring in the event this atypical mycobacterium may cause an infection in the immunodepressed cancer patients. The latter is treated as TB would be with antimicrobial drugs.



Figure 4. The technique of active specific immunotherapy involves injection of modified tumor cells and an adjuvant (in this case radiated melanoma cells and BCG) into lymph node basins for immunostimulation.

Active immunotherapy in both specific and nonspecific methods (principally by the BCG scarification method of Mathe) has proved to be of marginal benefit in management of patients with melanoma and acute leukemia but has not been widely accepted for treatment of most other cancer types.

Similarly passive immunotherapy can be both specific and nonspecific depending on whether tumor antigens are employed as the stimulus against which T- and B-cell products are raised. In early experiments serum was transferred from animals immunized to human tumors or serum from patients who were cured or showed unusual host resistance to their tumors. Because of limited donor resources and low yield of whatever the active ingredient is, this method has been of research interest only. The same is true for the production problems of subcellular fractions such as immune RNA. However, with respect to several cellular fractions thought to be amenable to recombinant DNA synthesis, some of these production problems might be overcome.

Undoubtedly you have heard from patients who are seeking nonspecific passive immunotherapy in the form of injections of substances recently read about and poorly understood: transfer factor, interferon, and thymosin. These substances are in very short supply but are being used because of their promise (as yet without conclusive proof of curative potential) in a variety of cancer protocols. Such passive immunotherapy factors may make a marginal difference in combination with other treatment plans. Their advantage is that they do not rely on a high degree of immunocompetence of the cancer patient. However, these passive immunotherapy methods share with active immunotherapy the fundamental paradox described earlier, concomitant immunity. That factors possess or can induce immunoreactivity against tumor cells does not assure a therapeutic effect, since cancer patients often have demonstrable immunity to their tumors even at the late stage when they are being overwhelmed. This observation has dampened some enthusiasm for immunotherapy,[9] which has not proved to be the "answer to cancer."

Should we give up on immunotherapy altogether and deflate patients' expectations concerning hopeful projections they have heard about immunity as the "magic bullet," perhaps their last defense against cancer? It might be proposed that the perspective be reversed: immunotherapy is the patient's *first* defense against cancer, a concept that should be remembered by the primary physician and passed on to the patients in his or her care. At present there is probably less to the subject of immunotherapy as a "new" treatment of cancer than there is to the fundamental support of the patient's nutrition and physiologic reserves to minimize the deleterious effect of cancer treatment on the patient.

Immunosurveillance

The concept of immune surveillance is very significant for the practicing physician and underscores that immunotherapy is the first line of defense against cancer. The immune system protects the patient from bacterial and other transmissible diseases, and the fundamental purpose of the "self-identity" programmed into the reticuloendothelial system is to maintain the functions in life's steady state, repelling noxious or parasitic invaders. By any number of criteria it is possible to plot a curve of immunocompetence through the life of a patient. That competence is quite low in embryologic life until self-realization and maturation of the immune system occurs. Primary physicians are well aware that children are much more susceptible to contagious disease than are adults after they have experienced the "usual childhood diseases," the term denoting that immunity is acquired as a rite of passage through childhood. In the prime of life, as seen in the hypothetical curve in Figure 5, immunocompetence and defense of the "self" is at its peak unless some intercurrent illness suppresses immunity. For example, trophoblastic neoplasms can occur in the immunosuppression of pregnancy; as previously noted, immunosuppression for transplantation purposes is followed by higher-than-normal incidence of malignancy, and the incidence of second neoplasms is higher following treatment with combinations of potent chemotherapeutic drugs and radiation. Absent these suppressions, the immune system retains its full vigor until very late in life when it declines.

In the same way the very young child and the elderly invalid are much more susceptible to pneumonia than is an individual in the prime of life, a curve could be drawn for the incidence of malignancy as suggested in

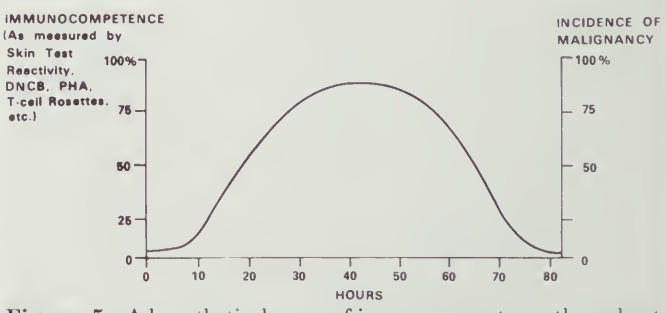


Figure 5. A hypothetical curve of immunocompetence throughout human life might show well-developed immunosurveillance in the prime of life (but lowered resistance at life's extremes) unless intercurrent illness or events should similarly suppress the curve in midlife.

the hypothetical curve seen in Figure 6. Incidence of malignancy is quite high in the newborn and in early childhood consisting of sarcomas, central nervous system tumors, and leukemias. The incidence of cancer dips lower in mid-life but rises sharply in older age, this time composed of degenerative diseases such as epithelial cancers, adenocarcinomas, and epidermoid carcinomas.

It may be no coincidence that these superimposed curves would resemble mirror images. One interpretation might be that as spontaneous mutations and environmental carcinogens act to produce malignant transformation in some cells in the body, the healthy immunosurveillence system detects these incipient malignancies because of the new and therefore foreign protein antigens associated with tumors and suppresses the development of this "non-self." Each of our patients may have started and stopped hundreds of cancers before they reached clinical awareness because the immune response remained intact. The development of a cancer that comes to clinical attention and often proceeds to overwhelm the host may be the exception that proves the general rule that under ordinary circumstances in health, malignant aberrations are detected and extinguished for the protection of host homeostasis. Only at times of impairment of the immune defenses or special circumstances (that may include iatrogenic influences or personal abuses) can a nascent malignancy escape the immune surveillance or overwhelm its delicate balance through the development of concomitant immunity. Such speculation is unfounded and is easily testable. Given the outbred nature of the human species and given the variety of genetic and environmental stimuli, cancer is certainly not a monolith in the relationships with each of the patients that bear it. However, such thinking may serve as a useful pattern to suggest the further extrapolation of immunoprevention.

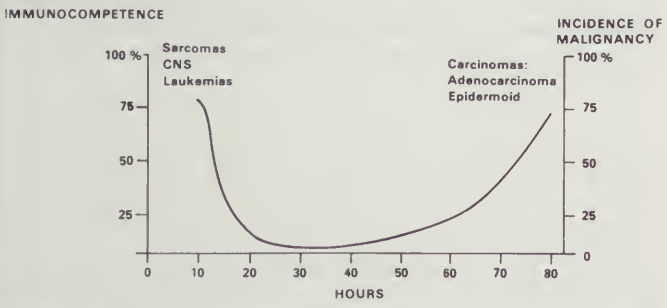


Figure 6. A similarly hypothetical curve for the incidence of malignancy, higher at life's extremes than in the mid-point; the mirror image of the curves is suggestive of a possible role of immunosurveillance in preventing development of pre-clinical cancers.

Immunoprevention

If tumor immunity can be proved but does not always seem to work, if both cellular and humoral immunity can work to control tumor cells but only at very highly favorable ratios (such as 100 to 1 killer cells to target), perhaps we are asking too much of the immune response to control gross tumor burden. It is unlikely that so delicate a mechanism as the immunologic system would ever be able to vanquish kilograms of tumor. By the time a tumor burden reaches the size of clinically apparent mass, it likely has escaped the controls of immunology that make measurements in microcytotoxicity. The phenomenon of concomitant immunity does not deny the effect of the immune response, but underscores it by calling forth a masking of tumor antigens or some other way for the "successful" tumor to skirt the host defense. If that is the case, we could extrapolate far earlier in the curve of "early cancer treatment" and anticipate cancer diagnosis.

If a wide variety of tumor-specific transplant antigens were identified and through the use of adjuvants the antigenicity could be enhanced to the point of developing a polyvalent vaccine, classic vaccination technique could be used for specific immunoprevention. Immunoprophylaxis would be far more effective than immunotherapy if the immune response is sensitive and specific but only capable of controlling the most minute tumor burden. With respect to cancer treatment, the immune response would be of marginal benefit until after the tumor burden had been reduced to the same cellular burden as possibly effective in immunoprevention.

This would be only speculation were it not for interesting observations made on a social program that turned out to be an unintentional experiment in nonspecific immunoprevention. During an outbreak of tuberculosis in Chicago, a program of BCG vaccination of school children was employed to control the epidemic. For several reasons, not including the interesting follow-up observation of the oncologic implications of BCG vaccination, only half the population of children was vaccinated. In retrospect, the age-matched control population not vaccinated was compared with the BCG-vaccinated population, not primarily for the incidence of tuberculosis in each group but for the incidence of leukemia found to be far higher in the group not receiving the BCG. This observation leaves open the credible possibility of development of nonspecific (if not specific) immunoprevention methods for future control of cancer as have been employed for control of contagious diseases.

A Perspective on Cancer Immunity

Although cancer immunotherapy has been disappointing, the early results should be regarded as phase one clinical trials. A proper perspective for the practicing primary physician would be to encourage these trials and to participate by contributing patients to controlled clinical trials of further rational treatment protocols. However, a much more important practical point emerges from the perspective of cancer immunity in patient care. The immune response is a very delicate mechanism of fine tuning in the checks and balances depicted in Figure 1. This fine tuning is part of the patient's own host homeostasis. It is our task as primary physicians to protect the patient and to keep intact those mechanisms of host resistance. Immunotherapy, therefore, is *the* primary treatment for any human cancer patient. The case can be made that no drug, surgery, or radiation therapy ever cures a patient of cancer, and only their immune response can be counted on to do that. As evidenced by the immunodeficient child, a theoretically perfect treatment for the tumor that sterilizes every malignant cell or removes it still leaves the patient susceptible to cancer. Since we have no perfect treatments that flawlessly neutralize tumors, we must regularly rely on the patient's immune response. To that extent, every operation, radiation, or drug treatment program is adjunct *to* primary immunotherapy on the part of the patient. Any operation or treatment that reduces the mass of tumor to a quantity of cells that can be managed by the immune response tips the balance in favor of the patient who can then control his/her disease. Of equal importance in Figure 1 is that there are no treatments aimed at the tumor that do not adversely affect the host. Each cancer treatment plan must be implemented with the primary focus on the patient and not on the tumor, since it is the patient who keeps coming back to our offices for follow-up and not our fascination with the tumor that makes us physicians. The maximum treatment plan that reduces tumor burden and minimizes the impact on host homeostasis is the optimum cancer treatment plan that serves as adjunct to the host's immune response. By these criteria, any method of cancer therapy that effectively lowers the tumor burden and least disturbs the host's reserves is—in reality—immunotherapy.

From this perspective, clinical immunology has been very effective. Its major benefits have come from the shift of focus from tumor to patient and the emphasis on nutrition and physiologic reserves to allow the patient to compensate for the side effects of toxic tumor treatments. The heavy burden of hope that was placed on clinical immunology when it was just progressing from the juvenile stage of its own methodology is now shared by the balanced perspective of the multiple modalities used in combination, each of which is adjunctive to the host primary immune response.

Immunodiagnosis and immunoevaluation are practical immunologic methods available for office use, facilitated in the former instance by the development of radioimmunoassays for markers and in the second case for emphasis on nutritional assessment and an intact cellular immune response. Though frustrated by the phenomenon of concomitant immunity, the future of immunotherapy and immunoprevention are exciting prospects impatiently awaited.

George Bernard Shaw thought the answer to all illnesses was simply to "stimulate the phagocytes." It may not be simple, but the patient's own immune response is the primary control of disease to which our treatments are adjunct. These treatments are successful if they reduce tumor burden with a minimal impact on that immune response, and effective therapy tips the balance in favor of host homeostasis.

References

1. Geelhoed, G.W. "Practical Immunology in Clinical Application to Patient Care." *J Cont Educ Primary Physician* 18(1983):651–62.
2. Rosenberg, S.A. "Cancer Immunology," Chap 10 in *Surgical Immunology*, Munster, A.M. (ed). New York: Grune and Stratton, 1976.
3. Slade, M.S.; Simmons, R.L.; Yunis, E.; and Greenberg, L.J. "Immuno-depression after Major Surgery in Normal Patients." *Surgery* 78(1975):363.
4. Geelhoed, G.W. "The Critical Patient and Multiple Systems Failures," guest editorial. *Am Fam Physician* 21(1980):68–70.
5. Geelhoed, G.W.; Becker, K.L.; O'Neill, W.; and Silva, O.L. "Calcitonin Studies in the Rhesus Monkey." *World J Surg* 5(1981):579–86.
6. Catalona, W.J.; Taylor, P.T.; Rapson, A.S.; and Chretien, P.B. "A Method for Dinitrochlorobenzenze Contact Sensitization: A Clinicopathological Study." *N Engl J Med* 286(1972):399–402.
7. Morton, D.L. "Cancer Immunotherapy: An Overview." *Semin Oncol* 1(1974):297.
8. Simmons, R.L. "Surgery and Immunodepression." *Surg Med* 3(1976):.
9. Good, R.A. "Cancer and Immunity: The Progress, the Disappointments and the Lessons of Both." *Hosp Pract* 14(1979):11–15.

Charles Frick: Professor of Materia Medica 1823–1860

THEODORE E. WOODWARD MD

Professor Frick, with a wonderful command of plain Saxon English, had few equals as a lecturer. Medical students and physicians of Baltimore attended his lectures because of their originality and practical use.

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Charles Frick was born in Baltimore on August 8, 1823, the son of the Honorable William F. Frick, distinguished member of the Maryland Bar and Judge of the Superior Court of Baltimore, and a recognized benefactor to the citizens of Maryland. His uncle was Dr. George Frick, a well-known Baltimore eye surgeon and a scholar who lectured in clinical medicine at the University of Maryland School of Medicine. His classical and mathematical education was completed at the Baltimore College. At the age of 16, he selected engineering as a profession and was employed as assistant civil engineer on the Baltimore and Ohio Railroad.

In the spring of 1843, he entered the office of his friend, Dr. Thomas H. Buckler, one of the leading practitioners in Baltimore. In autumn that year, he attended a course of lectures at the University of Maryland Medical School. After the session, he was admitted as a resident pupil to the hospital affiliated to the Baltimore City and County almshouse, where there were about 600 inmates and 200 bed patients. Here, Frick's great interest in his patients included coordination of the bedside manifestations and postmortem findings; he performed autopsy examinations.

In March 1845, Frick received his medical degree from the University of Maryland. His Inaugural Thesis, "Observations on Puerperal Fever," dated January 1, 1845, reviewed the prevailing views of the clinical manifestations to which he added personal observations gleaned from the study of seven patients. Frick spoke positively for the benefits of venesection in patients with puerperal fever. In his thesis, he dispelled any relationship of postpartum infection to erysipelas, which was a prevalent view. Also, he committed himself to study the contagious character of puerperal fever. The faculty referee remarked that Frick's thesis was "a very proper dissertation." Fittingly, he dedicated his thesis to his old mentor, Dr. Thomas Buckler.

In the spring of 1845, soon after graduation, Frick opened an office with his friend, Dr. Stedman R. Tilghman, a surgeon. The association lasted about two years because of the usual difficulties younger physicians experience in establishing a new practice. In 1845, Frick was appointed attending physician to the Maryland Penitentiary, a post he held for seven years. He examined convicts when admitted, weighed them systematically, made studies of their diets, and attempted to promote their health and welfare.

With Drs. Christopher Johnston, a prominent surgeon and faculty member, David Stewart, a physician-pharmacologist, and Elisha W. Theobald, Frick helped found the Maryland Medical Institute in 1847. This was a preparatory school of medicine stimulated in part by recommendations of the American Medical Association to help elevate educational standards. Frick was in charge of teaching practical medicine, which permitted him to further develop his pedagogic talents.

In October 1853, Charles Frick married Achsah, eldest daughter of Reverend Thomas B. Sargent, a well-known and respected Methodist clergyman, Figure 1.

William Power, whose wife Elizabeth was Charles' sister, was Chairman of the Department of Medicine at the Medical School from 1846 to 1852. Power, an astute bedside clinician, and Frick, the experimental clinician,



Figure 1. Charles Frick and his wife Achsah, whom he married in 1853.

were close friends and brothers-in-law. Undoubtedly, each had considerable influence on the other. Power had studied under Pierre Louis of Paris, where he learned the new technique of auscultation introduced previously by Laennec. From this French master he also learned the value of recording results of thorough examination, systematic analysis of clinical signs, and postmortem findings. Power introduced the teaching and practice of auscultation to Baltimore at the Baltimore Infirmary (University of Maryland Hospital).

Diagnosing and Recording

Influenced by his close relationship with Power and his new pursuits, Frick spent hours on the wards and clinics of the almshouse, going from patient to patient with his stethoscope and marking out the extent of organic involvement of the heart and lungs. Systematically, he ferreted out infiltrative lung lesions, cardiac murmurs, or previously unsuspected aneurysms. Frick perfected the technique of auscultation and was able, with his broad knowledge of disease processes, to form careful diagnostic opinions. These were based on correlation of the subjective symptoms with the physical findings, chemical changes in the blood and urine, and interpretation of the pathologic lesions. Moreover, he carefully recorded his findings. On leaving the almshouse, he had catalogued many clinical data on a variety of disorders and collected a set of anatomical preparations.

Frick, a young man of immense patience and industry and of independent opinion, followed the classic style of observation and experimentation practiced by the early nineteenth century physicians, such as Louis, Courvisart, and Chomel. Frick was described as a born investigator who, in his work, sought to explain how and why diseases occur and to clarify the effects of therapeutic regimens on such disorders. These industrious traits combined with a cheerful, genial, frank, forthright, modest, and unassuming character marked him as a man of great promise.

Frick's investigations embraced measurable pathophysiologic changes in patients with prevailing disorders such as tubercular phthisis, idiopathic fevers, rheumatism, anemia, and renal diseases including stone formation. His first paper in 1846 contained reports of patients with remittent fevers, which he correlated with organic and morbid changes noted in the liver, spleen, and heart. This paper was widely quoted particularly by Bartlett (Second Professor of Medicine at the University of Maryland) in his book on fevers. Most of his publications appeared in the *American Journal of Medical Sciences*.

In his evaluation of chemical changes of the blood, published in 1848, Frick reported analyses of organic and inorganic ingredients focusing on tuberculosis and other disorders. He painstakingly rejected 70 of 150 investigations because of his uncertainty about the validity of the results. In this paper, Frick correlated the concentrations of lime, soda, potash, and phosphoric acid and water and showed seasonal variations. The quantities of chlorides, phosphates, soda, and potash were noted to be higher during the winter and spring months than in the summer and fall. This he attributed to losses through the skin in warm weather.

Studies of Blood and Urinary Calculi

Frick studied clot formation and the relationships of fibrin, iron levels, and quantities of red cells in patients with purpura. This was closed with a prophetic statement: "ultimately chemistry plays a most important part in the production of disease; and in unravelling the tangled web of pathological hematology hereafter, its assistance must be principally relied on" (Cordell).

According to Holmes, "Professor Frick was one of the first in the country to investigate the chemical changes produced in the blood by disease" (O.W. Holmes, *Trans Am Med Assoc*, 1848).

> Important contributions relating to the differential characteristics of remittent fever and its clinical history were made by him in 1846; our present knowledge of this disease rests mainly on the facts contained in these contributions and those of Stewardson, Swett, Anderson, Stille and Bolling (Cordell, E.F. *Historical Sketch of the University of Maryland School of Medicine 1807–1890*. Baltimore: Press of Isaac Friedenwald, 1891, pp. 119–20; Donaldson, F. *Lives of Eminent American Physicians and Surgeons of the Nineteenth Century*, Gross, S. (ed). Lindsay and Blakiston, 1861).

A major work of Frick was his study of the formation of urinary calculi and the essays he published on the subject. His knowledge of uric acid metabolism was broad; he accepted that uric acid was a normal constituent of blood and that in acute and chronic gout an abnormal quantity was present. He noted no excess of uric acid in rheumatism. It was correctly stated that a deposit of uric acid or its salts does not always occur because there is an excess. Frick's writings describe phosphate calculi in the bladder as well as uric acid and lime oxalate calculi in the kidney. He advised that "remedies be addressed to the urinary passages themselves, and not to their secretions."

In 1855, Frick was appointed physician to the Union Protestant Infirmary. When the Maryland College of Pharmacy was reorganized in 1856, Frick, with his excellent background, was appointed Professor of Materia Medica. During spring and summer 1857, Frick visited Europe, particularly the hospitals in Paris and

London. He was received cordially by physicians such as Paget, Todd, Bence Jones, and Trousseau, who were well aware of his original and innovative contributions to clinical medicine, particularly his chemical measurements. Frick was especially gratified when he found these great pathologists were familiar with his scientific papers and had high regard of them. While on the continent, Frick collected herbs that he brought back to America to study and to strengthen his teaching of therapeutic medicine.

Professor of Materia Medica

When Professor Richard H. Thomas, Professor of Obstetrics at the University of Maryland Medical School, resigned in 1858, Professor George W. Miltenberger, Professor of Materia Medica and Therapeutics, was made Professor of Obstetrics. This made a vacancy in the Faculty of Medicine requiring a physician of high talents.

Frick had many offers for academic posts elsewhere, but his close social ties to Baltimore and his preeminence in medicine, as one qualified to conduct proper clinical and experimental studies culminated in his election to the vacant Chair of Materia Medica, Figure 2. He opened the fall session in 1858 with an "Introductory Address," in which he spoke of the mission of the medical profession, how the various basic and clinical disciplines are related, and the virtues and limitations of therapeutic remedies. Professor Christopher Johnston described it "as a discourse of great elegance." The course in Materia Medica was rejuvenated by Frick, and

> he stamped a powerful and individual impression upon the course of lectures he delivered and conducted his clinical teaching in so strikingly original, truthful and instructive a manner, as to fill his friends with pride and admiration (C. Johnston, "Proceedings of Memorial Meeting," Medical and Chirurgical Faculty, March 29, 1860).

Frick's Lectures are found in three volumes at the Library of the Medical and Chirurgical Faculty of Maryland.

In 1850 Frick published a volume on "Renal Diseases" in which he succeeded admirably in simplifying the study of urinary pathology. He advised his readers not to place too much confidence on either the chemical or microscopic examination of urine, but to place the findings in the same context that auscultation occupied in thoracic diseases: their significance to be interpreted by the other manifestations. In this book and other publications, Frick established that a form of dumbbell crystal contained uric acid as well as oxalate of lime. The work on dumbbell crystals, reported with drawings from microscopic visualization, showed the gradual development of these uric acid formations. His finding settled arguments prevalent at that time.

In an excellent clinical paper on diabetes mellitus, published in 1852, he described the influence of various treatments and diets on the course of illness. Frick's studies of urea convinced him that it was not entirely derived from the breakdown of nitrogenous tissues, but that it might be increased by the ingestion of nitrogenous food. He concurred with Liebig and Hammond that urea also was formed from the oxidation of uric acid.

In 1855 Frick reported to the Baltimore Pathological Society (published in the *Virginia Medical Journal* and elsewhere) that the mere presence of albumin in the urine, contrary to the views of Richard Bright, does not in itself indicate Bright's disease. Rather, it may be due to simple congestion or to pressure such as in pregnancy or other causes. In the same proceedings (Flint, International Congress, 1876), L.P. Yandell mentions Frick's work on renal diseases as among the ablest of the contributions made to our literature by the medical profession. (See Addresses on Memorial Meeting, Med-



Figure 2. Charles Frick MD, taken at the time of his appointment as Professor of Materia Medica at the University of Maryland School of Medicine in 1858.

ical and Chirurgical Faculty, March 29, 1860, Drs. Johnston, Donaldson, Steiner, and Cox.) Frick's last work was a "Lecture on Diuretics," published by his class. It embodied much of his earlier work and views.

In this remarkable lecture, which qualifies as a scientific writing, he describes the action of various diuretic agents including digitalis, mercury, and turpentine. He makes a case for the advantage of moderate venesection in certain cases. There are practical and accurate suggestions for students and practicing physicians who eagerly attended his lectures.

In 1856, Frick published a *Manual on the Diagnosis and Pathology of Renal Diseases*, which clarified a poorly understood subject. He made exhaustive analyses of the blood and urine in patients with fevers and renal disorders.

A painstaking study on the diuretic properties of various drugs, based on his studies of 2,000 separate observations of prison inmates, was presented to the Maryland Medical and Chirurgical Faculty at the annual meeting in June 1859. Frick stressed that frequently the extra amount of urine passed was related to the amount of perspiration as well as the quantity of water imbibed. He reported the diuretic action of quinine sulphate, juniper tea, iron prussiate, iron sulphate, and acetate of potash. Morphine and strychnine were found to have no diuretic effect. He believed the amount of solid material in the urine represented the waste of tissues seeking a urinary outlet and was important to diuretic action.

Pioneer Program

Frick completed two courses of lectures and, on assuming the Chair, immediately took charge of the medical department in the Infirmary where he had an exciting impact on students. On the medical wards, his excellent knowledge of chemistry and therapeutics and his diagnostic ability combined to make him a popular and persuasive clinician. Here he had the opportunity to practically test the value of remedies of which he spoke at the University. His credibility was made even greater because of his readiness to admit an error in diagnosis. He was an excellent lecturer who made dry subjects on drugs quite interesting. His knowledge of clinical medicine coupled with his exhaustive information of known forms of treatment and how diseases changed the body secretions marked him as a leader within the faculty. There was no limit to the favorable influence he exerted on the teaching of clinical medicine. This remarkable man coordinated a course of didactic lectures and clinical and laboratory studies, perhaps the first such in America. His instruction included discussions of pathophysiologic mechanisms and experimental therapeutics that were correlated with chemical measurements.

Charles Frick always conducted himself as a cultured gentleman despite his busy professional life. He advised one of his graduating classes,

> you should bear in mind always that you are members of an intelligent and civilized society—remember that the tendency of every pursuit is to give a certain narrowness to each individual's mind whereby he accords too great importance to his own occupation and underrates all others. In your leisure moments, therefore, endeavor in a knowledge of the useful and elegant arts and in the charms of polite literature, to enlarge those requirements, which are common to all educated men.

Fate changed the brilliant prophecy for his future. In March 1860, Charles Frick was caring for a woman with diphtheria on whom it became necessary for him to perform a tracheotomy. He contracted the disease and after a brief illness of five days, died at noon on March 25, 1860. By Frick's request, his friend and associate Dr. Miltenberger opened his throat, which only temporarily eased him. He died with his wife, mother, sister, brothers, and close medical associates by his side. He was thirty-seven.

Charles Frick's death and funeral attracted the attention and commanded the sorrow of the entire medical profession in Baltimore. He died a martyr to his profession. "He died as he had lived, all patience and courage, all endurance" (C. Johnston, Memorial Meeting, Medical and Chirurgical Faculty, March 29, 1860). He is memorialized by a room of the Library of the Medical and Chirurgical Faculty bearing his name (Figures 3 and 4) and by an endowed fund. During the brief period of his chairmanship, Charles Frick left an "imperishable memory in the Annals of the University" (Cordell, E.F.



Figure 3. Frick Library, former Maryland Medical and Chirurgical Faculty, 847 North Eutaw Street, Baltimore.

The Medical Annals of Maryland, 1799–1899. Vol. I. New York, Chicago: The Lewis Publishing Co., 1907).

The tragic death of Charles Frick at such a young age was a great loss to the medical school and hospital. He was a leader in his time who embodied all the attributes desired of a clinician in either the nineteenth or twentieth centuries. As a senior faculty member with unusual clinical ability, he sensed the need for incorporating experimental methods into teaching and committed himself to developing these objectives through laboratory study in the investigation of human illness. Contributions by Frick were innovative, new, and remarkably accurate, particularly in view of the limited technical assistance available to him. Clearly his work in the general fields of applied biochemistry, clinical pharmacology, and nephrology helped lay the foundations for those specialists who later were to devote their attention to qualitative and quantitative measurements of organ function and secretion.

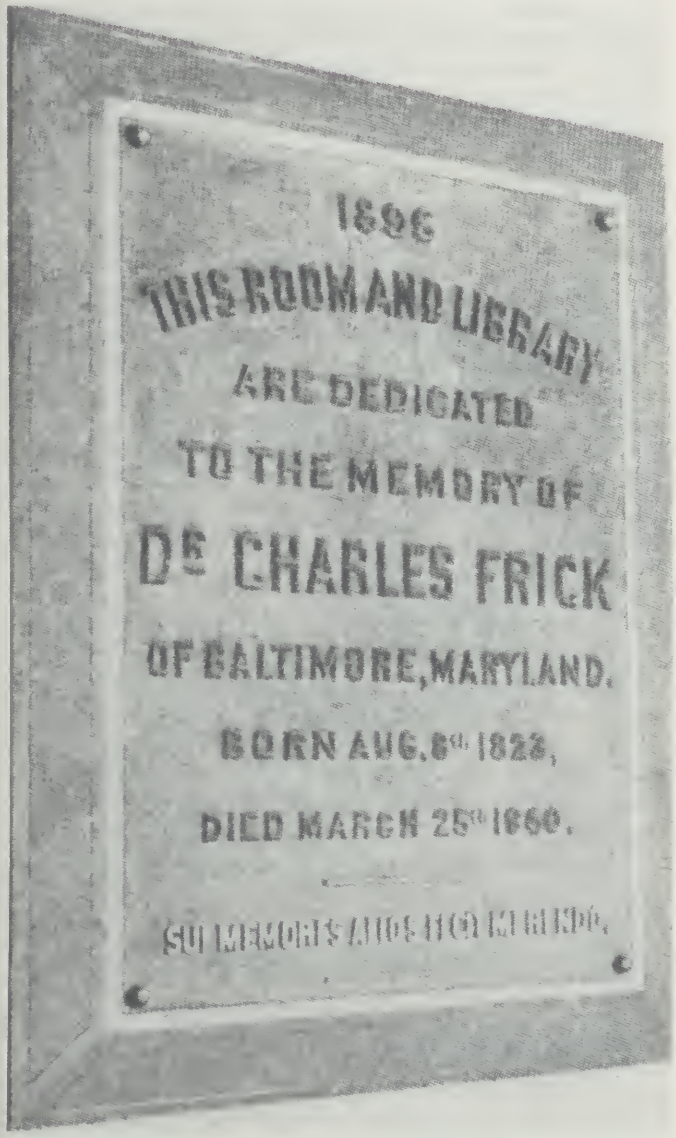


Figure 4. Memorial plaque to Charles Frick MD, Maryland Medical and Chirurgical Faculty, 1211 Cathedral Street, Baltimore.

Undoubtedly, had he lived Charles Frick would have succeeded to the Chair of Medicine after the tenure of Samuel Chew. Under his inspired leadership, research methods would have been initiated and developed, placing the school and hospital on a firm, established clinical and research basis soon after the mid-nineteenth century. With his high qualifications as a clinician, his intelligence, obvious intense interest and ability to evaluate chemical determinants of human illness, Frick was ideally suited to catalyze this transition to clinical teaching and applied basic research.

Because the established tradition in Baltimore that a major determinant of success in the profession (including medical faculty members) was the stature and volume of a physician's practice, this would have been difficult for him to accomplish. Frick would have required a full-time commitment to his teaching and research interests; this was an unacceptable role for medical faculty members until William Welch pioneered this concept at Hopkins. Research as an important facet of the University of Maryland's medical academic program had to wait well into the twentieth century before such changes occurred.

Bibliography

Anderson, N.F. and Frick, C. "Notes of Cases of Remittent Fever in the Baltimore Almshouse with an Analysis of the Cases by Alfred Stillé, Philadelphia." *Am J Med Sci* 312(1846).

Frick, C. "On the Oxalate of Lime Diathesis." *Am J Med Sci* 281(1848).

Frick, C. *Report of Cases in Maryland Penitentiary, Baltimore* 8 Vol. 1849.

Frick, C. *Renal Affections: Their Diagnosis and Pathology.* 8 Vol Philadelphia: Lea and Blanchard, 1850.

Frick, C. "Relation of Dumb-bell Crystals to Uric Acid (with Wood Cut)." *Am J Med Sci* XX:(1850):23.

Frick, C. "Cases of Saccharine Urine (Diabetes) with Tabular Observations of its Pathology and Treatment." *Am J Med Sci* 74(1852).

Frick, C. "Sequel of Case of Diabetes Mellitus." *Am J Med Sci.* XXX:(1853):399.

Frick, C. "Vital Statistics of Baltimore." *Am J Med Sci* XXX(1855):12–334.

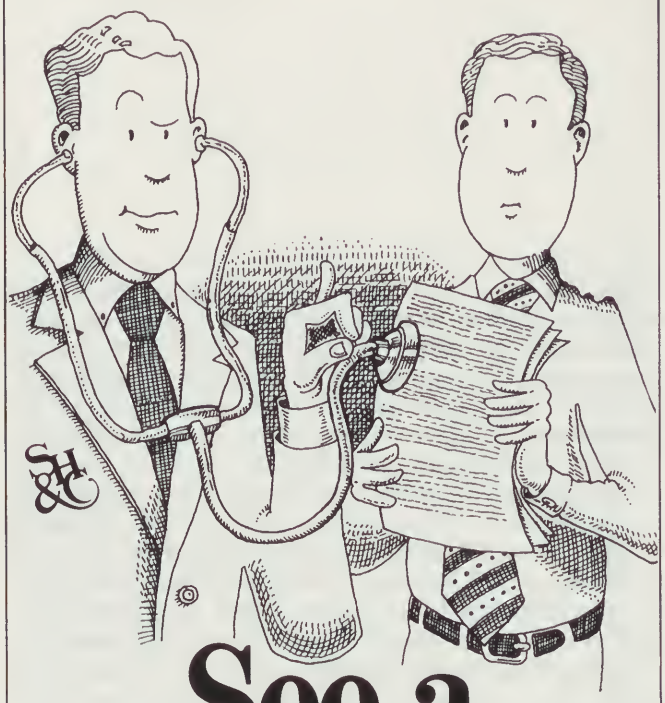
Frick, C. "Indigo Detected in the Urine." *Am J Med Sci* XXXII(1856):23–26.

Frick, C. "On the Pathology of Epidemic Dysentery." *Am J Med Sci,* October, 1857.

Frick, C. Valedictory Address to the Graduates of the Maryland College of Pharmacy Delivered March 6, 1857.

Frick, C. *Introductory Address Delivered Before the Medical Class of*

the University of Maryland, October 7, 1858. Baltimore: Samuel S. Mills, 1858.
Frick, C. "Lecture on Diuretic Remedies." *Va Med J* (1860):223–41.
Frick, C. "General Remarks on Diuretic Remedies. Published by His Class." Baltimore: John W. Woods, 1860.
Donaldson, F. "Lives of Eminent American Physicians and Surgeons of the Nineteenth Century." Gross, S.D. (ed). Lindsay and Blakiston, 1861.
Donaldson, F. "An Address Commemorative of the Life and Writings of the Late Charles Frick of the University of Maryland." *Md Med J* 4(1879):333–52.
Cordell, E.F. *The Medical Annals of Maryland 1799–1899.* Baltimore, 1903.



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Postgastrectomy Unresponsive Iron-Deficiency Anemia

LINDA BARR MD and ALI KESHAVARZIAN MD, MRCP

A 69-year-old man with profound iron-deficiency anemia following gastrectomy failed to respond to oral iron supplements although there was no overt gastrointestinal blood loss or other nutritional deficiencies. However, he responded to parenteral treatment. We suggest parenteral iron supplement should be seriously considered in rare cases of unresponsive postgastrectomy anemia.

From the Departments of Medicine at the Veterans Administration Medical Center and at the University of Maryland Hospital, Baltimore, MD.

Supported by the Veterans Administration.

Iron-deficiency anemia is a well-recognized and relatively common complication of gastrectomy[1–3] easily treatable by oral iron supplement.[1–7] Unresponsive iron deficiency is extremely uncommon after gastric surgery and generally reported in females;[1,7] this could well be secondary to menstrual blood loss rather than significant iron malabsorption. We report a case of postgastrectomy iron-deficiency anemia in a man without overt gastrointestinal bleeding.

Case Report

A 69-year-old black male presented with a ten-year history of microcytic hypochromic anemia. He has had intermittent malaise and weakness secondary to profound anemia, necessitating multiple hospital admissions and blood transfusions at least once a year during the last ten years. He underwent a Billroth II gastrectomy for a bleeding duodenal ulcer 22 years ago. He has not had diarrhea of other symptoms suggesting dumping syndrome. He has not experienced hematemesis, melena, fresh rectal bleeding, hematria, nose bleed, or bruising. He lost weight following surgery, but his weight has been steady for the last 20 years. He does not drink alcohol. He eats a balanced diet with average daily food iron intake of 8 mg, supplemented with oral iron preparations. There is no family history of ulcer disease, malabsorption, or anemia.

There was no abnormality on physical examination of this patient apart from pallor. His hemoglobin concentration has been between 6–8 g/dl for the last ten years despite continuous oral iron supplementation. Iron-deficiency anemia had been documented several times in the past on the basis of low serum iron, ferritin, and high total iron-binding capacity; and bone marrow aspiration demonstrated no stainable iron. His admission hematological data is shown in Table 1. There was no evidence of hemolysis with corrected recticulocyte count of 1.5%, normal serum haptoglobin, bilirubin, and negative urinary hemosiderin. Serum hemoglobin electrophoresis was normal. Peripheral blood smear showed hypochromic, microcytic red cells without other pathology. Numerous tests for stool occult blood were generally negative. Stool test for fat (sudan stain) was also negative. Gastrointestinal investigation results are summarized in Table 2. Gastroscopy demonstrated small gastric remnant with erythematous, friable mucosa. Gastric histology was consistent with nonspecific mild gastritis. Jejunal biopsy demonstrated normal villous architecture. Visceral angiography was normal.

He did not respond to supervised ferrous gluconate elixir 600 mg/day during an extended hospitalization with no change in reticulocyte count, serum iron, or hemoglobin. He was transfused to a hemoglobin of 9 g/dl. Subsequently, he was started on intramuscular iron dextran. His hemoglobin rose to 12.5 g/dl after four weeks of weekly 200 mg iron dextran injections. Iron dextran injection was stopped after calculated iron deficit was given. His hemoglobins has remained stable at 13.5 g/dl (Table 1) six months after cessation of parenteral iron.

Discussion

Iron-deficiency anemia is a well-recognized complication of partial gastrectomy[1–3] observed in both Bill-

Table 1. Patient's Data (Hematological and Biochemical)

	On Admission	After Treatment
Hgb (g/dl)	6.5	13.5
Hct (%)	21.4	40.5
WBC	6,200	4,800
Platelets	220,000	209,000
MCV (μ^3)	65	89
Serum iron (μg/dl)	45	75
TIBC (μg/dl)	505	335
Serum ferritin (ng/ml)	15	65
Serum B12 (pg/ml)	310	—
Serum folate (ng/ml)	5.2	—

Table 2. Patient's Data (Gastrointestinal Studies)

	Findings
Esophagogastroduodenoscopy	Gastritis
Colonoscopy	Normal
Barium follow-through	Normal
Barium enema	Normal
Jejunal biopsy	Normal
Urinary D-xylose	4.1g

roth I and II gastrectomy.[5,6,8] The incidence of anemia is variable and dependent on time elapsed since surgery[1] and on iron stores status prior to operation.[9]

The underlying cause(s) of postgastrectomy iron-deficiency anemia is poorly understood. While inadequate intake of iron[1,2] may contribute to iron deficiency in some, impaired absorption was thought to be a more significant factor in other individuals.[1-6,8,10-13] It is not clear whether occult blood loss plays an important role in iron-deficiency anemia in these patients. Using chromium-51 labeled red blood cells, gastrointestinal blood loss was considered a significant factor in developing anemia in gastrectomized patients,[4] whereas a more sensitive means of assessing iron loss (total body radioiron counting) did not demonstrate any difference between anemic gastrectomized patients and normal individuals.[8,14]

The absorption of iron in the small intestine depends on the availability of iron for absorption, the epithelial transport mechanisms, and gastrointestinal transit.[1,12,15-17] The importance of decreased gastric acid secretion in iron absorption in gastrectomized patients is still debatable.[4,6,10,11,12,17-19] The significance of gastrointestinal transit abnormalities in iron absorption in these patients was highlighted by some augmentation of iron absorption following recumbency and atropine injection in these patients.[2,12] These changes in gastrointestinal motility and intraluminal pH could decrease intraluminal iron availability for absorption by the chelating effect of undigested foods.[1,12,17] Small intestinal mucosa was shown to be normal in these patients.[1,12] Furthermore, there was no correlation between steatorrhea and iron malabsorption.[12]

The majority of gastrectomized patients respond to oral iron replacement. Of 713 iron-deficient cases in the literature, only eight patients failed to respond to oral supplementation.[1-7] An additional 85 patients with iron deficiency complicated by megaloblastic anemia responded appropriately to oral iron preparations when other vitamin deficiencies were corrected.[1,3] The details of two of eight unresponsive cases are available. These were menstruating women who responded to parenteral iron.[1] The menstrual iron loss in these women may have exceeded their marginal absorptive capacity.

The present case demonstrated that significant iron-deficiency anemia can occur in the absence of overt blood loss in gastrectomized subjects. Furthermore, one may observe iron malabsorption in the presence of normal intestinal mucosal histology and fat absorption. We suggest that in other orally unresponsive, iron-deficient gastrectomized patients, when a source of blood loss is not found and other nutritional deficiencies have been excluded, parenteral iron replacement should be considered.

References

1. Baird, I.M.; Blackburn, E.K.; and Wilson, G.M. "The Pathogenesis of Anemia after Partial Gastrectomy. I. The Development of Anemia in Relation to Time after Operation Blood Loss, and Diet." *Q J Med* 28(1959):21–33.

2. Hobbs, J.R. "Iron Deficiency after Partial Gastrectomy." *GUT* 2(1961):141–49.

3. Hines, J.D.; Hoffbrand, A.V.; and Mollin, D.L. "The Hematologic Complications following Partial Gastrectomy." *Am J Med* 43(1969):555–69.

4. Kimbler, C.; Patterson, J.F.; and Weintraub, L.R. "The Pathogenesis of Iron Deficiency Anemia Following Partial Gastrectomy." *JAMA* 202(1967):935–38.

5. Stevens, A.R.; Pirizo-Biroli, G.; Hapkins, H.N.; Nyhus, L.M.; and Finch, C.A. "Iron Metabolism in Patients after Partial Gastrectomy." *Ann Surg* 149(1959):534–38.

6. Moeschlin, S.; Schmid, J.R.; and Schnider, T.H. "Increased Absorption of Radioiron in Gastrectomized Patients by the Addition of Hydrochloric Acid." *Acta Haematol* 33(1965):200–209.

7. Turnbull, A.L. "Iron Deficiency after Partial Gastrectomy." *Proc Soc Lond* 63(1970):1225–27.

8. Hallberg, L.; Solvell, L.; and Zederfeldt, B. "Iron Absorption after Partial Gastrectomy." *Acta Med Scand* [Suppl] 445(1966):269–75.

9. Callender, S.T. *Post-gastrectomy Nutrition*, 1967. Cited by Turnbull, A.L. "Iron Deficiency after Partial Gastrectomy." *Proc Soc* 63(1970):1225–27.

10. Ryabov, R.I. and Ryss, E.S. "Iron Absorption in Gastric and Duodenal Pathology in Patients with Iron Deficiency Anemias." *Folia Hematol* (Leipz) 103(1976):906–14.

11. Kelly, K.A.; Turnbull, A.; Cammock, E.F.; Bombeck, C.T.; Nyhus, L.M.; and Finch, C.A. "Iron Absorption after Gastrectomy: An Experimental Study in the Dog." *Surgery* 62(1967):356–60.

12. Turnbull, A.L. "The Absorption of Radioiron Given with a Standard Meal after Polya Partial Gastrectomy." *Clin Sci* 28(1965):499–509.

13. Geokas, M.C. and McKenna, R.D. "Iron-Deficiency Anemia after Partial Gastrectomy." *Can Med Assoc J* 96(1967):411–17.

14. Baird, I.M. and Sutton, D.R. "Blood Loss after Partial Gastrectomy." *GUT* 13(1972):634–37.

15. Cox, T.M. and Peters, T.J. "Cellular Mechanisms in the Regulation of Iron Absorption by the Human Intestine: Studies in Patients with Iron Deficiency Before and After Treatment." *Br J Haematol* 44(1980):75–86.

16. Hausmann, K.; Kuse, R.; Sonnenberg, O.W.; Bartels, H.; and Heinrich, H.C. "Interrelations between Iron Stores, General Factors and Intestinal Iron Absorption." *Acta Haematol* 42(1969):193–207.

17. Hoglund, S. "Deficiency and Absorption of Iron in Man." *Acta Med Scand* [Suppl] 518(1970):5–23.

18. Murray, M.J. and Stein, N. "Experimental Achylia Gastrica and Iron Absorption." *Br J Haematol* 21(1971):113–20.

19. Dagg, J.H. "Some Aspects of Iron Deficiency and Gastric Function." *Schweiz Med Wochenschr* 102(1972):1633–41.

Diabetic Eye Care 1986: Education is the Key

GERALD D. ROGELL MD

Despite the availability of treatment, diabetes is today the leading cause of new blindness in adults. If unnecessary diabetic blindness is to be prevented, physicians and patients must be made aware of the importance of annual eye examinations in the early detection of proliferative retinopathy and macular edema.

Dr. Rogell is President, American Diabetes Association Washington, DC Area Affiliate and Assistant Clinical Professor of Ophthalmology, Georgetown University Medical School.

Diabetes continues to be the leading cause of new blindness in adults in the United States. Increasingly, however, much diabetic visual loss can be prevented or reversed with early detection and appropriate treatment. Two major studies published within the past few months demonstrate the effectiveness of recently developed techniques for fighting visual loss in diabetics and underscore the vital importance of an annual ophthalmological examination for every diabetic.

Proliferative Retinopathy

There are many ways in which diabetes can affect the eye, and treatment must be tailored to the individual situation. The first major breakthrough in preventing diabetic blindness came in 1976, when the Diabetic Retinopathy Study proved that laser treatment is effective against proliferative retinopathy.[1,2] In this type of retinopathy, new fragile blood vessels grow out from the retina, often leading to hemorrhage and retinal detachment. Laser treatment can destroy the proliferative vessels before they have a chance to damage the eye. Treatment is most effective when given before there is vitreous hemorrhage, when the retinopathy is asymptomatic and can be detected only by a careful ophthalmoscopic examination.

If proliferative retinopathy is not detected early, or if laser treatment is not fully effective, hemorrhage within the eye can block light and keep it from reaching the retina. Vitrectomy surgery can remove such hemorrhages from the eye and restore vision, but until recently we did not know when to operate, since many hemorrhages clear without surgery. The common policy has been to wait a year or more before considering vitrectomy. Now the Diabetic Retinopathy Vitrectomy Study (DRVS) has shown clearly that for Type I diabetics with severe vitreous hemorrhage, vitrectomy should be performed within the first several months after the hemorrhage.[3] Armed with this new information, we can be more vigorous in treating vitreous hemorrhage in Type I diabetics and can expect to achieve faster visual recovery and a higher overall success rate than with delayed surgery.

Macular Edema

A very different and more subtle loss of vision develops when diabetes damages the retinal capillaries, allowing fluid to seep out and resulting in macular edema and blurred vision. Macular edema is one of the conditions that was targeted for study by the Early Treatment Diabetic Retinopathy Study (ETDRS), a major nationwide NIH research project that has been under way for several years. The ETDRS has published its first findings showing that laser treatment often can prevent visual loss in macular edema.[4] Treatment is more effective the earlier it is given, and it is recommended that treatment be given while vision is completely normal, even before the diabetic has noticed any blurring. The ETDRS estimates that 50 percent of all visual loss due to macular edema can be prevented with this technique.

These studies show we now have powerful means to treat three of the most common causes of blindness from diabetes: proliferative retinopathy, vitreous hemorrhage, and macular edema. In all three conditions, the key to successful treatment is early detection and diagnosis of the problem. This is particularly important for proliferative retinopathy and macular edema, where the best time for treatment is when the vision is still normal.

Annual Examinations

The only way these research findings can be translated into actual prevention of blindness is for each diabetic to have his/her eyes carefully examined at least once a year, whether or not he/she is experiencing any visual problem. The examination should include the instillation of drops to dilate the pupils, and should be performed by an ophthalmologist: in a recent study in a university setting, 52 percent of internists and 33 percent of diabetologists missed the diagnosis of proliferative diabetic retinopathy, while fewer than 10 percent of ophthalmologists missed this diagnosis.[5]

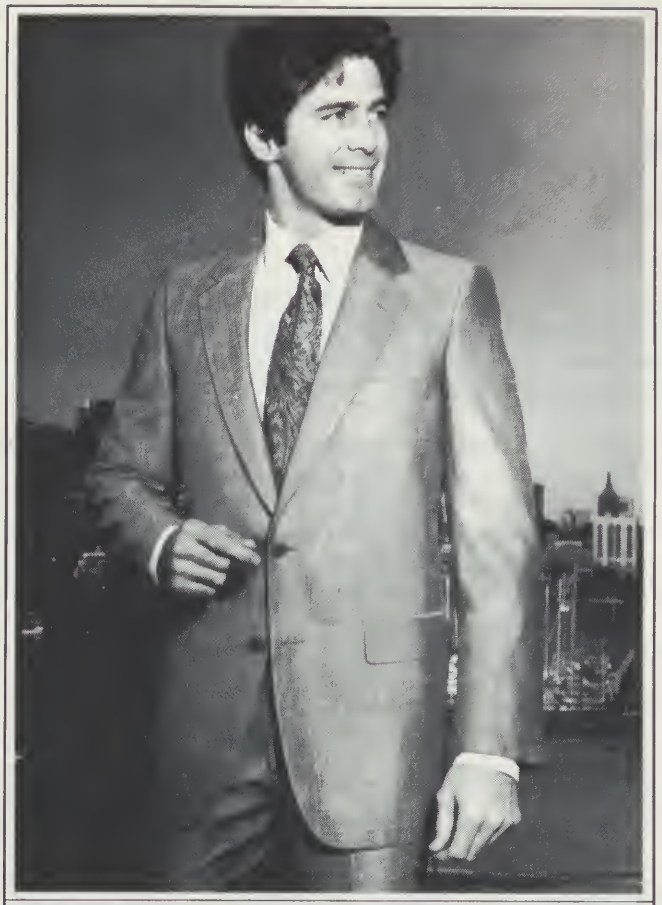
To provide the required level of care, physicians and other health care professionals must undertake a conscious effort to educate the diabetic population. In Michigan, for example, the state developed Diabetic Retinopathy Guidelines in 1984. A recent survey, however, showed that less than half the diabetics had been told to have their eyes examined at least annually, and only 26 percent had been told the complete recommendations in Michigan's guidelines.[6] Patient education, when it is given, is effective: diabetic individuals who received advice consistent with the Michigan guidelines were twice as likely to have visited an ophthalmologist

during the past year as those who had not received such advice (67 percent compared with 34 percent).

Periodic eye examination, an official recommendation of the American Diabetes Association for some years, is now more important then ever. If this practice is followed, then most visual loss from diabetes can be prevented or reversed, and diabetics can reasonably expect to have good vision throughout their lives. The critical first step is for every physician to emphasize to each diabetic the importance of an annual dilated eye examination by an ophthalmologist.

References

1. The Diabetic Retinopathy Study Research Group. "Preliminary Report on Effects of Photocoagulation Therapy." *Am J Ophthalmol* 81(1976):383–96.
2. Diabetic Retinopathy Study Research Group. "Report No. 3: Four Risk Factors for Severe Visual Loss in Diabetic Retinopathy." *Arch Opthalmol* 97(1979):654–55.
3. The Diabetic Retinopathy Vitrectomy Study Research Group. "Early Vitrectomy for Severe Vitreous Hemorrhage in Diabetic Retinopathy." *Arch Ophthalmol* 103(1985):1644–52.
4. Early Treatment Diabetic Retinopathy Study Research Group: "Photocoagulation for Diabetic Macular Edema." *Arch Ophthalmol* 103(1985):1796–1806.
5. Sussman, E.J.; Tsiaras, W.G.; and Soper, K.A. "Diagnosis of Diabetic Eye Disease." *JAMA* 247(1982):3231–34.
6. Herman, W; Halpern, M.; Pack, B.E.; *et al.* "Improving Eye Care for Persons with Diabetes Mellitus." *MMWR* 34(1985):697–99.



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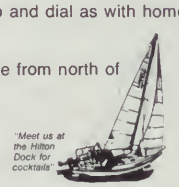
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The Role of Cleft Palate Teams

KRISTIN STUEBER MD and PATRICIA LANDIS MA

Cleft lip and palate deformities represent one of the most frequently occurring congenital anomalies in Maryland. We describe the current treatment methods and provide information on the Cleft Palate Teams and Parental Support Groups in this state.

Stueber is Associate Professor, Plastic and Reconstructive Surgery, University of Maryland School of Medicine, Baltimore. Landis is Speech Pathology Consultant, Crippled Children Services, Maryland State Department of Health and Mental Hygiene.

Cleft lip and palate is one of the most common congenital anomalies in the United States, second only to club foot in incidence. Cleft lip with or without cleft palate occurs in approximately 1 in 700 live births but does have some variation depending upon the racial origin of the patient (Table 1). In Maryland there are approximately 52 children born with cleft lip and/or palate each year.[1]

Table 1. Incidence of Cleft Lip with and/or without Palate by Race[2]

Caucasian	1:700
Black	1:1500
Oriental	1:300

Incidence

In general, cleft lip deformities with or without cleft palate are more common in the male, and isolated cleft palate deformities more common in the female. Incidence can be affected by family history. If one parent has a cleft lip with or without cleft palate, the incidence of clefting in children is approximately 4 percent. On the other hand, if the parent has cleft palate alone the incidence of clefting in the first child is 6 percent. If there is a cleft child and one parent has a cleft, the incidence of clefting in subsequent children can be as high as 17 percent. In contrast, the incidence of a second child having a cleft, if the parents are normal, is approximately 4 percent but varies some depending on whether there is a history of clefting in other members of the family.

Although heredity appears to be a factor in the cause of approximately 30 percent of cleft lip and palate anomalies, the etiology in the vast majority is multifactorial. The presence of a genetic predisposition usually must be accompanied by some other condition (such as teratogenetic, environmental) in order for the anomaly, which occurs in the first trimester of the pregnancy, to be manifest.

Correction of Deformity

The surgical procedures available to correct cleft lip and palate deformities result in near normal function and appearance, even in the child with severe clefts. Use of preliminary procedures (such as lip adhesion) to diminish the gap in very wide clefts of the lip prior to definitive repair usually result in a better lip repair.

Surgical repair of the lip is completed relatively early, when the child is about three months old. Usual criteria for readiness for lip repair are: age of 10 weeks or older, weight of 10 pounds or greater, and hemaglobin of at least 10gm/100ml.

The most popular method of repair is the one described by Millard.[2] With this repair the main suture line is placed so that it creates a new philtral ridge. The procedure also allows the re-creation of the cupid's bow and thus a natural lip contour. The procedure is best suited for the patient with a unilateral cleft lip but gives good results in the patient with a bilateral cleft lip.

In Figure 1, a left cleft lip is illustrated. Figure 2



Figure 1. Preoperative photograph of a patient with a unilateral cleft lip.



Figure 2. The patient at age 5 showing good lip contour and nasal symmetry.



Figure 3. Preoperative photograph of a patient with a bilateral cleft lip.

shows the patient at age 5 years with good contour to the lip and symmetry of the nose.

Figure 3 is the preoperative photograph of a child with a bilateral cleft lip. Immediately postoperative there was a shortness of the central portion of the lip. However, this grew, and as can be seen in Figure 4, the child has a fairly normal lip contour at age 4 years.

Procedures currently in use for repair of the palate are successful in producing normal speech in approximately 90 percent of the patients treated. Repair of the cleft palate is completed at about one year in an effort to establish adequate palate function by the time the child begins to speak and to avoid development of faulty speech patterns because of the unrepaired palate.

There are several methods of palate repair. Generally most use the available tissue on the palate to provide closure of the defect with mucous membrane and periosteum. The two methods most commonly used for closure of palatal defects are the von Langenbeck and the pushback procedures.

The von Langenbeck uses flaps of the mucosa covering the palatal shelves as flaps but does not attempt to lengthen the palate. The pushback, as its name indicates, attempts to lengthen the palate by detaching the mucosal flaps anteriorly and moving the tissue closer to the posterior pharyngeal wall. Each method is best suited to particular types of cleft palates.

Even with a technically correct repair of the palate there may be deficiencies in the child's speech due to inadequate function of the palate. This condition, velopharyngeal incompetence, occurs in 10 to 15 percent of patients with repaired cleft palates. An additional procedure using tissue from the posterior pharyngeal wall



Figure 4. The patient at 4 years old.

to augment the soft palate may be needed if the patient's speech will not improve with speech therapy alone.

Role of the Cleft Palate Team

Since individuals with cleft lip and palate have associated problems and, possibly, additional congenital anomalies, the diagnosis and management of these patients by an interdisciplinary team evolved long before such teams became vogue with other medical/educational problems.

Diagnosis and management of cleft lip and palate and other craniofacial anomalies by an interdisciplinary team have distinct advantages for the patient, family, and professionals in the community who may provide some of the treatment. The patient's dental, medical, surgical, and habilitative needs can be addressed by the team on one date at one location. Furthermore, the team meets as a group on that date to discuss findings and to develop an appropriate, coordinated, properly sequenced treatment plan. The team also can assist the family with case management so that the recommended care can be completed in a timely manner.

Experience has demonstrated that the process of evaluation, treatment and planning, and monitoring of the treatment outcome is more cost effective for the patient and family through the team approach. In addition, there is less likelihood of fragmented care that can be counterproductive. Consequently, government health agencies in several states, including Maryland, have developed standards of care that mandate evaluation by a craniofacial team before a case can be considered for financial assistance with treatment.

Organization of Cleft Palate Teams

The American Cleft Palate Association (ACPA), an organization of professionals with special interest and expertise in the habilitation of cleft lip/palate and other craniofacial anomalies, has established criteria for a team treating patients with craniofacial anomalies including cleft lip and palate. A team must consist of at least a plastic surgeon, a dental specialist (pediatric dentist and/or orthodontist), and a speech pathologist. One of the team members must be a member of the ACPA. Other specialists included on the team are pediatricians, otolaryngologists, geneticists, audiologists, and social workers. (A directory of approved teams in the United States is available from the National Office of the American Cleft Palate Assoc., 331 Salk Hall, University of Pittsburgh, Pittsburgh, PA 15261.)

Each member of the team should possess expertise in her/his own speciality so that she/he can make appropriate contributions in the diagnosis and treatment process. Of equal importance in the development of an individualized treatment plan, is the team's ability to function as a *Team*, with mutual respect for the knowledge and skills of each discipline represented. The following are the most frequently represented team members and their roles.

Otolaryngology A common problem in children with a cleft palate is the persistence of middle ear disease, most likely due to abnormal functioning of the Eustachian tube opening mechanism. These children develop persistent serous otitis media. If untreated, this can become infectious and result in significant hearing loss, which in turn handicaps the child in the acquisition of normal speech and language. Early and regular audiological assessments are a crucial aspect of the otolaryngologic management of children with cleft palate.

Pediatrics In addition to providing examination of the "whole" child, pediatricians may provide insight into possible genetic syndromes (important in the total care of the child) and can provide counseling to families on future pregnancies.

Dental Specialists Dental professionals on the team usually are pediatric dentists and orthodontists. They provide information and guidance about delayed or abnormal eruption of teeth, restorative care, and the subsequent correction of occlusal deformities. On occasion, malalignment of teeth and jaws may require a surgical approach involving the additional skills of a maxillofacial surgeon.

Speech Pathologist The speech pathologist provides guidance on the development of speech and language skills and assistance in determining appropriate surgical intervention for the correction of persistent velopharyngeal incompetence.

Plastic Surgeon The plastic surgeon provides the surgical skills to repair the cleft lip and palate anomalies present in these children.

The three cleft palate teams in Maryland are at the Children's Hospital and Center for Reconstructive Surgery, The James Lawrence Kernan Hospital, and the Washington County Health Department (Table 2, next page). Each team functions independently and has a different combination of specialists. All three teams meet the minimum requirements for approval of the ACPA.

Parents' Groups

There are three parent support groups (Table 3, next page) in Maryland to provide information about feeding children with clefts and to provide emotional support

Table 2. Cleft Palate Teams in Maryland

Facial Rehabilitation
Children's Hospital and Center for
Reconstructive Surgery
3825 Greenspring Ave.
Baltimore, MD 21211
(301-462-6800 Ext 3380)
Co-Directors:
John E. Hoopes MD
Craig Dufresne MD

Cleft Palate Diagnostic Program
James L. Kernan Hospital
2200 Forest Park Ave.
Baltimore, MD 21207
(301-448-2500 Ext 299)
Director: Hans R. Wilhelmsen MD, DDS
Coordinator: Patricia Landis MA

Washington County Orofacial Clinic
Washington County Health Dept.
1302 Pennsylvania Ave.
Hagerstown, MD 21740
(301-791-3250)
Director: John W. Clark MD, DDS
Co-Director: Michael D. Hall MD

Table 3. Parents' Support Groups

Maryland Society for Cleft Lip and Palate Children
Contact Numbers:
Balto Area (301-788-8742)
(301-666-2780)
Laurel (301-776-7702)
Meets in Baltimore. Serves Metro Balto and surrounding counties.

Tri-State Cleft Lip/Palate Support Group
Contact Numbers:
Hagerstown (301-223-6333)
(301-791-3291)
Pennsylvania (717-762-5406)
(717-762-6937)
Meets in Hagerstown. Serves Washington, Garrett, and Frederick Counties and adjacent areas of Pennsylvania and West Virginia.

Cleft Information and Support Association of Greater Washington
Contact Numbers:
(703-250-6686)
(301-681-7845)
Meets in Washington, DC. Serves Washington and surrounding metropolitan area.

National Cleft Palate Association
P.O. Box 2647
Hutchinson, Kansas 67501

to parents of newborn cleft children. These groups generally meet monthly to present information to their members; they also provide information to the public about cleft lip and palate anomalies. In Maryland the parents' organizations have been an active advocacy group to obtain additional clinical services and funding for the care of children with craniofacial anomalies. Members of parents' groups were instrumental in enacting legislation in Maryland that mandates health insurance benefits for children with cleft lip and palate anomalies beyond the traditional coverage for surgery.

In an attempt to strengthen and coordinate educational and advocacy efforts nationwide, a national support group was formed. The National Cleft Palate Association was organized approximately two years ago under the auspices of the American Cleft Palate Educational Foundation. One of the first major accomplishments through their joint efforts was the establishment of the Cleft Palate Hotline (1-800-24-CLEFT) to provide parents of children with clefts or other concerned individuals with information about local resources.

Financial Aid

Many treatment services required for the correction of problems associated with cleft lip and palate are covered by private health insurance or by the Medical Assistance Program.

Individuals with limited resources who do not have private insurance and who are not eligible for Medical Assistance may qualify for financial help from Crippled Children's Services of the Maryland State Department of Health and Mental Hygiene. Families seeking assistance from Crippled Children Services for treatment should contact their local health department or the Central Office of Crippled Children's Services (301-225-5580). In an attempt to insure comprehensive and coordinated care, Crippled Children's Services requires that individuals approved for financial assistance with treatment costs are evaluated and monitored by an interdisciplinary team.

Referral

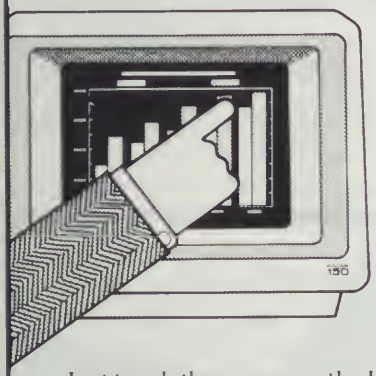
Patients may be referred to a team at any time during the course of treatment. Greater continuity of care can be provided if the child is seen shortly after birth or early in the course of habilitation. Referral may come from the parents, the pediatrician, a speech pathologist, a plastic surgeon, or other allied health professional.

Referrals to a team may be for an assessment and treatment plan, a second opinion, and/or for treatment. Whenever possible, the patient returns to the referral source for completion of the recommended treatment

or to resources in the patient's local community. If the referral is for assessment or second opinion, the findings and recommendations of the various team members are sent to the referring health care professional to assist in further care of the patient. If the necessary treatment is not available at the local level, it will be undertaken by the appropriate team member.

References

1. Maryland Birth Defects Reporting and Information System January, 1984–December, 1984. Maryland State Department of Mental Health and Hygiene.
2. Millard, D.R. *Cleft Craft*. Boston: Little, Brown and Co., 1976.



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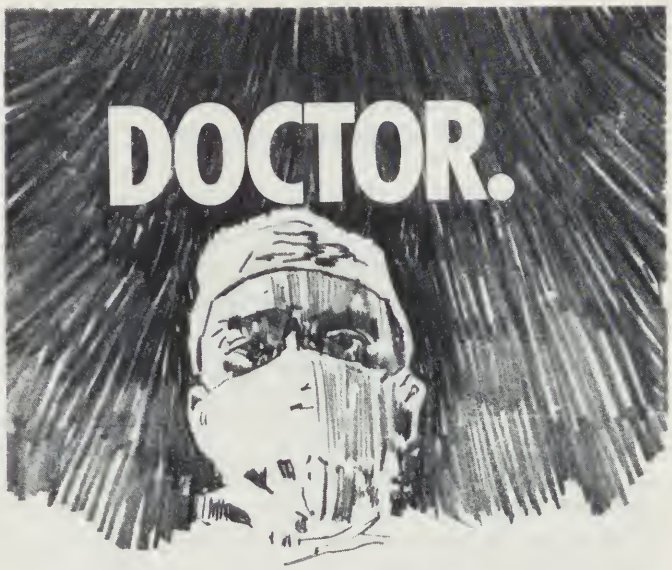
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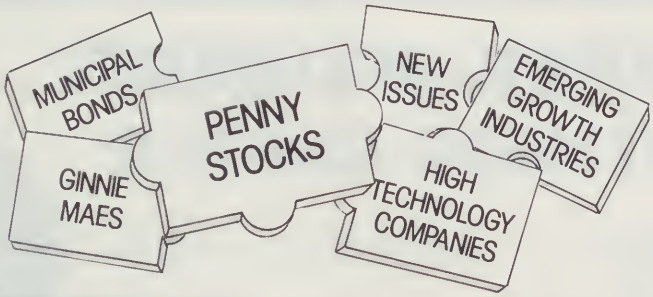
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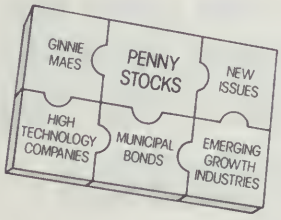
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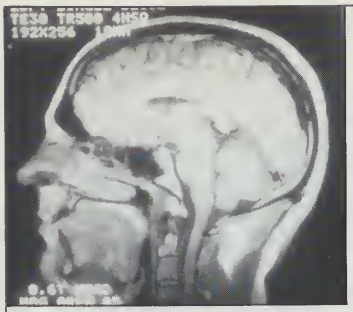
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FEWER SIDE EFFECTS IN ANTIANGINAL THERAPY

BRIEF SUMMARY

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist).

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered.

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

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References: **1.** *Physicians' Desk Reference®*, ed 39. Oradell, NJ, Medical Economics Company Inc, 1985. **2.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **3.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982; 50(Sept):94-116. **4.** Subramanian VB: Comparative evaluation of four calcium antagonists and propranolol with placebo in patients with chronic stable angina. *Cardiovasc Rev Rep* 1984; 5:91-104. **5.** Schroeder JS, Feldman RL, Giles TD, et al: Multiclinic controlled trial of diltiazem for Prinzmetal's angina. *Am J Med* 1982; 72:227-231. **6.** Weiner DA, McCabe CH, Cutler SS, et al: The efficacy and safety of high-dose verapamil and diltiazem in the long-term treatment of stable exertional angina. *Clin Cardiol* 1985; 7:648-653. **7.** Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. *Consultant* 1984; 24(Dec):150-159.

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Sep 29–Oct 1 NIH Consensus Development Conference—Infantile Apnea and Home Monitoring, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info and registration: B. Mc Chesney, Prospect Assoc., Ste 401, 2115 E. Jefferson St., Rockville, MD 20852 (301-468-6555).

Oct 17 Selected Topics in Pediatrics, sponsored by Eastern Virginia Medical School/Children's Hospital of the King's Daughters, Norfolk, VA. Info: J.E. Shelton MD, Children's Hospital of The King's Daughters, 800 West Olney Rd., Norfolk, VA 23507 (804-628-7179

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The Johns Hopkins Medical Institutions

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985–86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Sep 5–7 15th Annual Diagnostic Ultrasound in Obstetrics and Gynecology, Baltimore Mariott-Inner Harbor. Fee: physicians $325, sonographers/RNs $250; 18 ¾ AMA Cat I credits, ACOG cognates available. Info: C. Kearney, 301-955-3168.

Sep 18–19 Pediatrics for the Practitioner, Update '86. Fee: physicians $175, nurse/practitioners & retired physicians $125, interns & residents $75; 13 AMA Cat I credits. Info: J Ryan, 301-955-5880.

Sep 22–26 28th Annual Emil Novak Memorial Course: Gynecology, Gynecologic Pathology, Endocrinology, and Obstetrics. Fee: $550, $400 residents; 45 AMA Cat I credits, ACOG cognates. Info: C. Kearney, 301-955-3168.

Oct 9–11 12th Annual Topics in Gastroenterology and Liver Disease. Fee: physicians $325, residents and fellows $160 (with letter verifying status); 20.5 AMA Cat I credits. Info: J. Ryan.

Oct 17–18 Update in Dermatology for the Nondermatologist, Harbor Court Hotel, Inner Harbor, Baltimore. Fee: $150; AMA and other appropriate credit is pending. Info: J. Ryan, 301-955-6046.

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/86. Info: J. Mosmiller 301-955-8450.

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Ophthalmic Electrophysiology Technician Training Course (ongoing 1-week course by appointment), The Wilmer Eye Institute, Baltimore. Info: C.M. Kearney.

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University of Maryland School of Medicine

CME Course: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Sep 12–13 Heart Assist Devices—Heart Replacement, Harbor Court Hotel, Baltimore. Fee: TBA; 12 AMA Cat I credits.

Sep 26 Current Concepts in Ophthalmology: 7th Annual Clinical Conference, Columbia Inn, Columbia. Fee: $60, 6 AMA Cat I credits.

Oct 8 Comprehensive Management of the Cancer Patient, Baltimore Hilton Inn, Pikesville. Fee: TBA; 6 AMA Cat I credits.

Oct 23–24 CO_2 Laser for Otolaryngologists and Allied Specialties. Fee: $675; 12 AMA Cat I credits.

Oct 31 Echocardiology. Fee: $75; 6 AMA Cat I credits.

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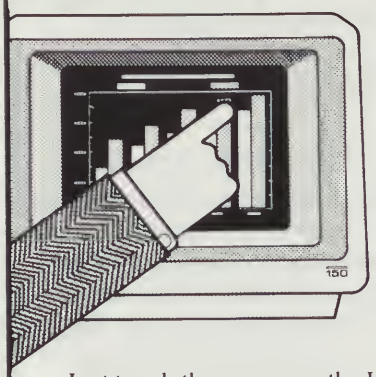
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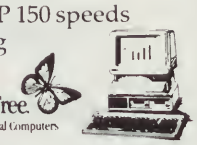
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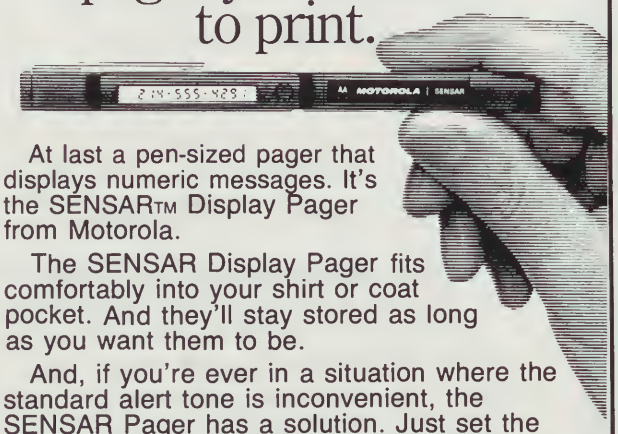
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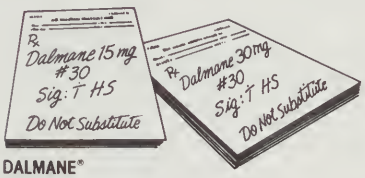
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On the cover: Donald T. Lewers, Med-Chi's new president, is a nephrologist practicing in Easton. Article begins on page 635. (All photos in this issue are by TADDER/Baltimore.)

The views in this publication are those of the authors and do not necessarily reflect the opinion of the Medical and Chirurgical Faculty of the State of Maryland.



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Medical Miscellany

Host Families Sought

Host families are sought for 25 high school students from Sweden, Norway, Denmark, Finland, Holland, Belgium, Austria, Switzerland, Germany, France, Italy, Brazil, Ecuador, Australia, Japan, and Spain for the *school year* 1986–87, in a program sponsored by the American Intercultural Student Exchange (AISW).

The students, age 15 through 17, will arrive in the United States in August 1986, attend a local high school, and return to their home country in June 1987. The students (all fluent in English) have been screened by their school representatives in their home countries and have spending money and medical insurance. Host families may deduct $50 per month for Income Tax purposes.

AISE is also seeking *American high school students* age 15 through 17, who would like to spend a high school year in Australia.

Families interested in this program should contact Linda Burgin, 9217 Paddock Lane, Potomac, MD 20854 (301-762-2858) or telephone 1-800-SIBLING.

Women Needed for Birth-Control Study

Women between the ages of 18 and 35 who are not currently taking birth-control pills are needed for a study of oral contraceptives at The Johns Hopkins Medical Institutions. Participants will receive free birth-control pills, a free physical examination, free follow-up visits, and $200 upon completion of the study. For more information, call 301-955-2149.

• • •

Volunteers Sought for Allergy Studies

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Letter to the Editor

Tort Reform

In the May 1986 *Maryland Medical Journal* it was reported (on page 346) that "under a bill recently signed into law, noneconomic awards for medical malpractice cases in Missouri will be limited to $350,000." Actually the legislation enacted in Missouri limits awards for noneconomic damages to $350,000 *per defendant*.[1]

In our efforts to achieve meaningful tort reform it is critical that we be aware of such nuances. Another example is a change in the collateral source rule. This type of change is critical. In her authoritative monograph Patricia Danzon has pointed out that "states mandating the offset of compensation from collateral sources had 50% lower awards within two years whereas laws that admit evidence of collateral compensation without mandating offset, had no discernible effect."[2]

WILLIAM H. MOSBERG, Jr., MD
Baltimore

References

1. "Mo Law Puts Cap on Malpractice Awards." *Am Med News*, Feb 14, 1986, p. 16.
2. Danzon, P.M. *Medical Malpractice Theory, Evidence and Public Policy*. Cambridge, MA: Harvard University Press, 1985.

Dr. Mosberg points out a very critical distinction. Editor

Future Med-Chi Meetings

1986 Semiannual
September 10–14
Montreal

September 14–17
Post-Convention Trip
Chateau Frontenac
Quebec City

1987 Annual
April 29, 30, May 1
Omni International-Baltimore

1987 Semiannual
Mid-September
Maui, Hawaii

1988 Semiannual
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ROBERT M. TULISZEWSKI, M.C., Adams-Hanover Urology Associates, P.C. of Hanover, PA maintains, *"Aspects of both old and new financials concepts are blended into viable techniques to help you maximize your income."*

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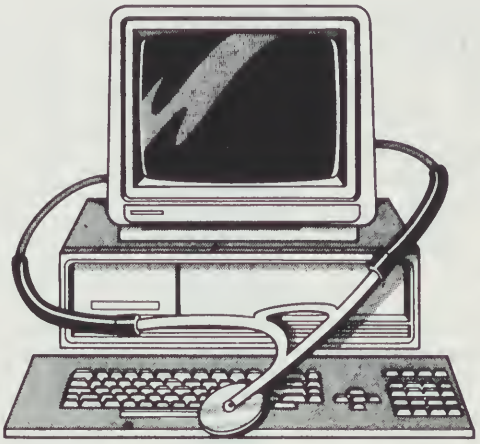
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Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

Our concern with Alzheimer Disease is only one of many ways Meridian Healthcare is different. For more detailed information on our Alzheimer program or on any of our 13 Nursing Centers in Maryland, call or send the coupon for our free *Referrer's Guide*.

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Members in the News



Albert M. Antlitz MD recently was awarded a citation by William Donald Schaefer, Mayor of Baltimore, for his "role in the formation of the Center for Health Education, Inc., which promotes disease prevention and health education activities among physicians." Dr. Antlitz was instrumental in obtaining the support of the Medical and Chirurgical Faculty, Blue Cross/Blue Shield of Maryland, and Maryland physicians in establishing the Center in 1982. Due to his initiative, physicians throughout Maryland have been able to take advantage of programs and materials designed to assist them in educating and in promoting the health of their patients. In presenting the citation to Dr. Antlitz, Mayor Schaefer shared his interest in health care and reiterated his commitment to caring for people. (From left: **Susan R. Guarnieri** MD, Commissioner of Baltimore City Health Department; Mayor Schaefer; Dr. Antlitz; and Carmine M. Valente, Executive Director, Center for Health Education, Inc.)

• • •

B. Stanley Cohen MD has been appointed acting president of Sinai Hospital. Dr. Cohen, Chief of Rehabilitation Medicine at the hospital for 20 years, assumed the position June 1. A search committee has been formed to seek a permanent president.

Dr. Cohen is the state medical advisor in the Division of Vocational Rehabilitation in Maryland's Department of Education. He is a Professor of Rehabilitation Medicine and a Senior Associate in Epidemiology at the Hopkins School of Hygiene and Public Health.

Dr. Cohen was an internist in private practice from 1953 to 1963 when his career took a new turn, serving a residency and fellowship in physical medicine and rehabilitation at Baylor University Medical Center in Dallas. In 1966 he was appointed by Sinai to develop the Department of Rehabilitation Medicine. Dr. Cohen attended Johns Hopkins and the University of Maryland, from which he received his MD in 1947. For the next four years he trained at Sinai and the VA Hospital in the Bronx, NY.

Joan P. Edwards MD, oncologist/hematologist, has been appointed section head of oncology at Fallston General Hospital. Dr. Edwards joined the hospital's medical staff in 1985.

Dr. Edwards received her bachelor's degree in microbiology at the University of Maryland. After serving as a doctoral candidate in the department of microbiology, she received her MD from the University of Illinois at the Medical Center in Chicago. She completed an internship and residency and a fellowship in hematology/oncology at the University of Michigan Hospitals.

• • •



Leon E. Kassel MD, Med-Chi's Council Chairman (right), accepted the AMA 1985 membership award on behalf of the Medical and Chirurgical Faculty from Harrison L. Rogers MD at the AMA National Leadership Conference last February.

• • •

David W. McClure MD has been named section head of family practice at Fallston General Hospital. Dr. McClure provides physician staffing for the Fallston Family Health Center located at the hospital.

A member of the medical staff at FGH since 1984, Dr. McClure received his medical degree from the University of Maryland. He completed a three-year family practice residency at University Hospital, serving as co-chief resident his third year.

• • •

Roy O. Scholz MD, Towson, received the Distinguished Public Service Award from the Health and Human Services Department for his worldwide battle against eye disease and blindness. HHS Secretary Otis R. Bowen cited Dr. Scholz as "a pioneer in the field of ophthalmology, as a catalyst for the widespread establishment of eye banks in this country and abroad, and as a tireless advocate for improving the health of those in developing areas around the world."

• • •

Daniel I. Welliver MD was reelected to the Federation Licensing Examination Board at the annual meeting of the Federation of State Medical Boards in Minneapolis, MN. Subsequently, the FLEX Board elected Dr. Welliver as Vice-Chairman.

A family practitioner in private practice in Westminster, Dr. Welliver graduated from the University of Maryland Medical School and has been an Assistant Clinical Professor of Family Medicine for more than ten years at the University. He has served on the Commission on Medical Discipline and has been a member of the Board of Medical Examiners since 1974, serving as President from 1979 to 1983.

• • •



H. Margret Zassenhaus MD received the 1986 A.H. Robins Award for Community Service at Med-Chi's Annual Meeting. The award is presented each year to a physician member of Med-Chi who has demonstrated outstanding service and commitment to the community.

Born in Hamburg, Germany, Dr. Zassenhaus served as an appointed official of the German government during World War II. In that capacity she aided political prisoners under her charge with food, clothing, and medical supplies. After the war, she was invited by the Norwegian and Danish governments to come to Scandinavia, where she pursued her medical studies.

Dr. Zassenhaus immigrated to the United States in 1952. She has spent the last 30 years volunteering many hours to speak against apathy and to encourage social responsibility.

In presenting the award to Dr. Zassenhaus, Faculty President **J.D. Drinkard** MD said, "Dr. Zassenhaus has served her state and local communities through ongoing civic and cultural involvement. Throughout her life she has stressed that survival is an individual responsibility. Compassion, love, and human decency, particularly when standing in defiance of adverse but powerful forces, have been the theme of her personal and charitable efforts."

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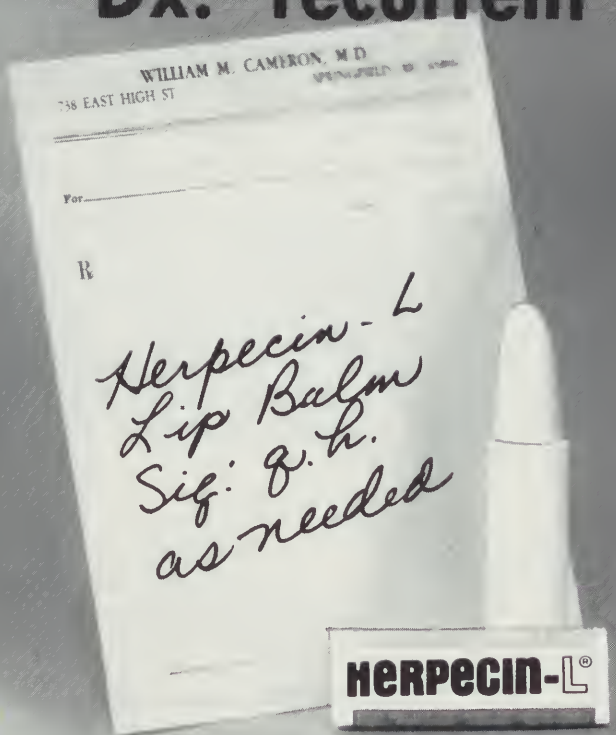
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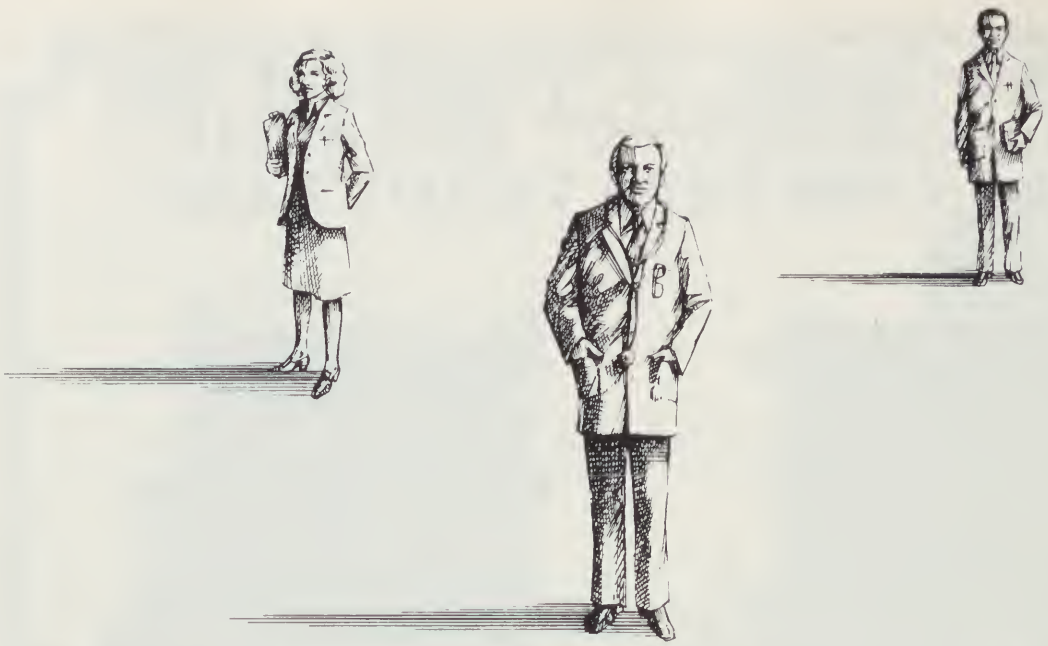
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Executive Director's Newsletter

August 1986

FREEZE MELTDOWN

As the Congressional House and Senate conferees work toward final language on the 1987 budget reconciliation, it appears relief is in sight from the Medicare fee freeze. Both houses have included language that will remove the freeze on what Medicare pays for physician services. Physicians who treat Medicare patients should receive a 1987 update in their prevailing charge profiles based on the increase in the Medicare Economic Index - 3.2 percent. Participating physicians could receive an additional 1 percent if the language passed by the House Ways and Means Committee prevails. Nonparticipating physicians also will receive an increase of the MEI plus 1 percent. The proportion of Maryland physicians participating in the Medicare program was 30.4 percent in 1984 and 1985 with the numbers falling to 28.5 percent by May 1986. The national sign-up rate is 28.4 percent.

Favorable language was a direct result of physicians and auxilians across the country responding to a call from the AMA to bring an end to the inequitable fee freeze. Three committees dealt with the freeze language including the House Energy and Commerce Committee which includes Maryland's Third District Congresswoman, Barbara Mikulski. Energy and Commerce language is slightly different from that of the Ways and Means, but it removes the freeze and also increases the payments. Two additional proposals in this Committee would have eliminated the limit on charges for services where the Medicare payment is reduced through application of the "inherently reasonable" criteria and would have ended the Participating Physician Program after December 31, 1987. Unfortunately, both failed with Representative Mikulski voting against them.

MUTUAL FIRE INSURANCE PROBLEM

The Mutual Fire, Marine and Inland Insurance Company has been placed under the supervision of the Insurance Commissioner of Pennsylvania for a 90-day period, ending on September 11, 1986. During this period, judgments and litigation costs (including attorney's fees) will not be paid. If you are insured through this company and are involved in litigation, consult with your attorney as to the status of your case. If you are served with a new suit, check with your agent and carrier. However, be advised that under Maryland law you must file an answer within 30 days of service of the suit papers. Failure to answer may result in the entry of a default judgment against you. Even if you must hire an attorney, it is critical that you file an answer. Any questions concerning these issues may be directed to Judith A. Wood, Legal Counsel for the Faculty.

BUILDING ASSESSMENT

Billing for the $100 assessment for the building fund was mailed to all members in June. If you have not yet paid the bill, please mail your check.

PHYSICIAN DRAFT

In another AMA victory, the proposal by G. V. Sonny Montgomery of Mississippi to require physicians to register for the draft was defeated decisively. Representative Montgomery, in a press release, credited the American Medical Association with the defeat of the bill.

TORT REFORM UPDATE

Maryland joined 23 other states in passing significant tort reforms in 1986. Governor Harry Hughes expects to name a task force that will begin meeting in September to look at activity in other states and to make a recommendation to the next governor. Israel Weiner MD will be asked to serve on the 12-member committee.

SCHOOL #49

After many exasperating delays, School #49 construction is nearing completion. A reunion of graduates is being held at the Meyerhoff Symphony Hall on Sunday, September 14 with 1,300 people expected to attend the ceremonies and to tour the renovated building.

SEPTEMBER 9 1986

The future of medicine in Maryland can be said to begin on this date. Like so many states dominated by one political party, the choice of the voters in the Primary Election often becomes the final choice in November. 1986 is a politically significant year with several incumbents leaving top slots in the state. For the first time in many years open seats occur for Senate, third, fourth, and eighth congressional districts, Governor, Lt. Governor, Attorney General, and several Maryland House and Senate races.

What does this mean for medicine? The men and women elected on September 9 may well control the legislature in Maryland for the next eight years. The problems they will be asked to solve will be significant: professional liability, organ transplantation, and allocation of future health care resources for the elderly, the disabled, the indigent.

Your vote counts! **VOTE ON SEPTEMBER 9, 1986.**

Acting Executive Director

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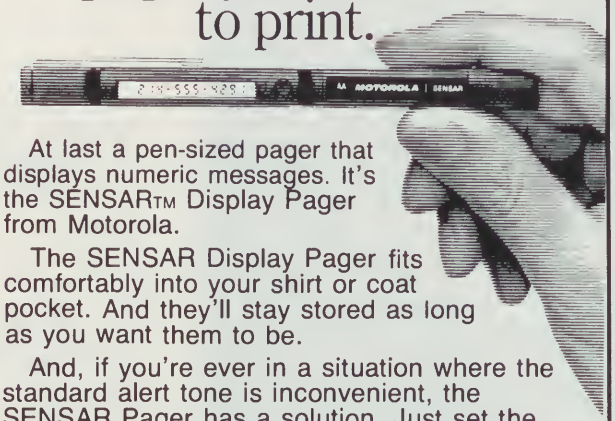
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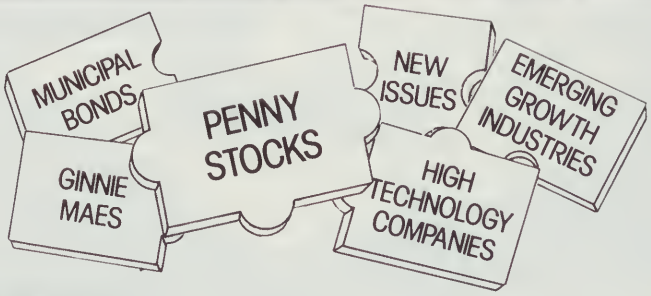
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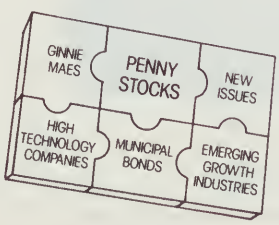
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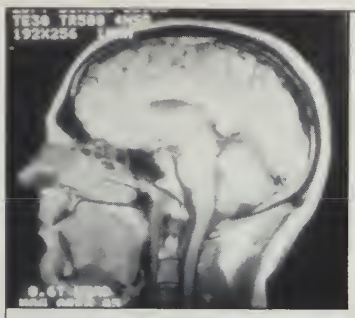
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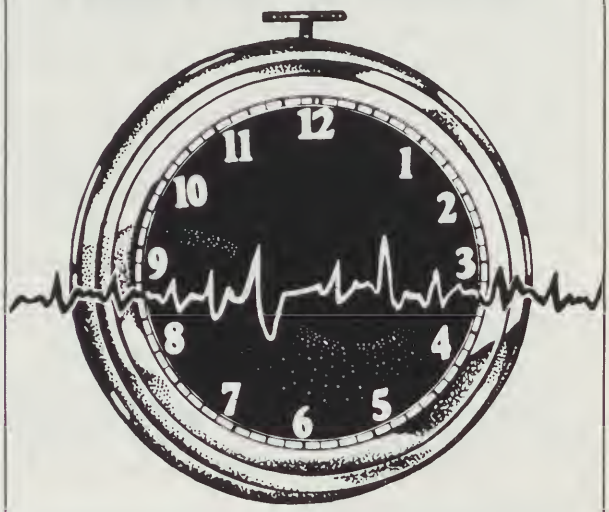
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Doctors Take Note

The Johns Hopkins Medical Institutions

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1985-86. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Sep 5–7 15th Annual Diagnostic Ultrasound in Obstetrics and Gynecology, Baltimore Mariott-Inner Harbor. Fee: physicians $325, sonographers/RNs $250; 18 ¾ AMA Cat I credits, ACOG cognates available. Info: C. Kearney, 301-955-3168.

Sep 18–19 Pediatrics for the Practitioner, Update '86. Fee: physicians $175, nurse/practitioners & retired physicians $125, interns & residents $75; 13 AMA Cat I credits. Info: J Ryan, 301-955-5880.

Sep 22–26 28th Annual Emil Novak Memorial Course: Gynecology, Gynecologic Pathology, Endocrinology, and Obstetrics. Fee: $550, $400 residents; 45 AMA Cat I credits, ACOG cognates. Info: C. Kearney, 301-955-3168.

Oct 9 Present and Future Trends in Cardiology, Sheraton Inner Harbor Hotel. Fee: $20; 5 AMA Cat I credits. Info: P. Macedonia, 301-955-6085.

Oct 9–11 12th Annual Topics in Gastroenterology and Liver Disease. Fee: physicians $325, residents and fellows $160 (with letter verifying status); 20.5 AMA Cat I credits. Info: J. Ryan.

Oct 17–18 Update in Dermatology for the Nondermatologist, Harbor Court Hotel, Inner Harbor, Baltimore. Fee: $150; AMA and other appropriate credit is pending. Info: J. Ryan, 301-955-6046.

Oct 29–31 and **Mar 4–6 An Advanced Pediatric Life Support Course.** Fee: $375; 20 AMA Cat I credits, other appropriate credits pending. Info: D. Heydinger, 301-955-6046.

Oct 30–31 A Scientific and Educational Symposium: Technology Assisted Children at Home, Washington Sheraton, Washington, DC. Fee: $85; appropriate credit pending. Info: P. Macedonia, 301-955-6085.

Nov 1–2 Hemodynamic Monitoring/Patient Care and Pulmonary Artery Catheterization. Fee: $360; 14 AMA Cat I credits. Info: J. Ryan, 301-955-6046.

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/86. Info: J. Mosmiller 301-955-8450.

Basic Practicum Aug 11–15, Sep 22–26, Nov 17–21. Fee: $460; 40 AMA Cat I credits.

Advanced Obstetrics & Gynecology Nov 5–7. Fee: $325, 24 AMA Cat I credits.

Visiting Physicians offered weekly throughout the year for experience in the lab and participation in reading sessions. By appointment. Fee $460; 40 AMA Cat I credits.

Continuously throughout the year. One-week Microsurgery Training Course. Basic technique and principles, 40 AMA Cat I credits. Info: Prog. Coord. 301-955-3169.

Johns Hopkins Medical Grand Rounds: audiocassettes, slides, and booklet. 30 topics and 40 AMA Cat I credits/year. Contact 301-955-3988, Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205.

Opthalmic Electrophysiology Technician Training Course (ongoing 1-week course by appointment), The Wilmer Eye Institute, Baltimore. Info: C.M. Kearney.

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University of Maryland School of Medicine

CME Course: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Sep 12–13 Heart Assist Devices—Heart Replacement, Harbor Court Hotel, Baltimore, Fee: $200; 12 AMA Cat I credits.

Sep 26 Current Concepts in Ophthalmology: 7th Annual Clinical Conference, Columbia Inn, Columbia. Fee: $60, 6 AMA Cat I credits.

Oct 8 Comprehensive Management of the Cancer Patient, Baltimore Hilton Inn, Pikesville. Fee: TBA; 6 AMA Cat I credits.

Oct 23–24 CO_2 Laser for Otolaryngologists and Allied Specialties. Fee: $675; 12 AMA Cat I credits.

Nov 3 Fetal Echocardiology, Harbor Court Hotel, Baltimore. Fee: $125, 6 AMA Cat I credits.

Nov 6–8 Soft Tissue Surgery Practicum. Fee: $675; 18 AMA Cat I credits.

Nov 14–15 Advances in Basic and Clinical Urology, Sheraton Inner Harbor, Baltimore. Fee: TBA; 12 AMA Cat I credits.

Visiting Professor Program—Directory of speakers and topics available for area hospitals and other health care organizations. An administrative fee is charged. Info: 301-528-3956.

Visiting Practitioner Preceptorship—Opportunity for physicians to participate in clinical situations in the University of Maryland Hospital. Requires approval from clinical department heads. Hour-for-hour AMA Cat I credits.

Sep thru Jun—Departmental Rounds and Conferences—Hands-on opportunity for practicing physicians, including lectures and discussions, produced by clinical departments. Hour-for-hour AMA Cat I credits.

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Miscellaneous Meetings

Sep 13–16 39th Annual Conference for Engineering in Medicine and Biology, Marriott Hunt Valley Inn, Baltimore. Fees: before Sep 1, member $135, nonmember $185, student $40, one day $65; after Sep 1, member $170, nonmember $225, student $45, one day $75. Info: Alliance for Engineering in Medicine and Biology (ACEMB), 1101 Connecticut Ave. NW, Suite 700, Washington DC 20036 (202-857-1199).

Sep 17 Recent Findings on Narcotic Addicts and their Behavior, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

Sep 19–20 Maryland Chapter American College of Surgeons Fall Meeting, Sheraton Inner Harbor, Baltimore, 9 a.m.—noon. Speakers: George Zuidma MD and Senator Orrin Hatch. 3 CME credits. Info: P. Stewart 301-646-3226.

Sep 23 Clinical Disorders of the Esophagus, Maryland General Hospital. Info: Department of Medicine, Maryland General Hospital 301-225-8790.

Sep 29–Oct 1 NIH Consensus Development Conference—Infantile Apnea and Home Monitoring, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info and registration: B. Mc Chesney, Prospect Assoc., Ste 401, 2115 E. Jefferson St., Rockville, MD 20852 (301-468-6555).

Oct 6–8 NIH Consensus Development Conference—Platelet Transfusion Therapy, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info and registration: S. Feldman, Prospect Assoc., Ste 500, 1801 Rockville Pike, Rockville, MD 20853 (301-468-6555).

Oct 15 Recognizing and Treating Depression, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322.

Oct 17 Selected Topics in Pediatrics, sponsored by Eastern Virginia Medical School/Children's Hospital of the King's Daughters, Norfolk, VA. Info: J.E. Shelton MD, Children's Hospital of The King's Daughters, 800 West Olney Rd., Norfolk, VA 23507 (804-628-7179

Oct 17–18 Alternative Delivery Systems: Strategies for Physician Control, sponsored by the American Society of Internal Medicine, Marriott Crystal Gateway, Washington, DC. Fee: ASIM members $350, nonmembers $425. Info: ASIM, 1101 Vermont Ave NW—Ste 500, Washington, DC 20005-3457.

Nov 13–14 Current Controversies in the Management of Prostate Carcinoma, Hyatt Regency Hotel, Inner Harbor, Baltimore, sponsored by the American Cancer Society, held in conjunction with the Mid-Atlantic Oncology Program. Info: K. T. Drake MD, Chairman, Dept. of Radiation Oncology, GBMC, 6701 N. Charles St., Baltimore, MD 21204 (301-828-2540).

Nov 19 Panic Disorders, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

Nov 21–22 Regional Scientific Continuing Medical Education Meeting, American College of Physicians, Annapolis. Info: F.M. Calia MD, VA Medical Center, Medical Service (111), 3900 Loch Raven Blvd., Baltimore, MD 21218 (301-467-4824).

Dec 17 The Application of Bowen Family Systems Theory to Spouse Abuse, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

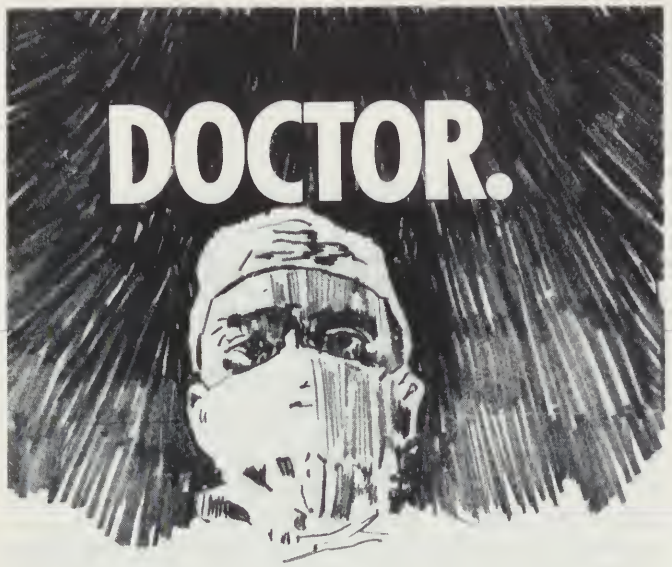
License Registration Renewal

Physicians whose surnames begin with the initials A through L will be renewing their license registrations this September 1986. The Board will start mailing renewal information around the middle of July.

Physicians who have not received the renewal information by the second week in August should contact the Board to get the information necessary for renewal before their licenses expire on September 30, 1986. It is the physicians' responsibility, by law, to communicate with the Board concerning renewal of their licenses if, for some reason, they do not receive the renewal application.

Physicians may contact the Board by writing to the address below or calling 301-225-5900.

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Donald Theodore Lewers MD

Med-Chi's 126th President

ANN WINTRISS

Organized medicine faces many problems and many issues: today's problem may be tomorrow's critical issue. The issues keep shifting. Donald T. Lewers, Med-Chi's president for 1986–1987, believes all these innumerable issues and problems in Maryland medicine can be subsumed into two specific categories: the erosion of the physician-patient relationship and the corporate invasion by alternate health care systems as it affects the practice of medicine.

Remarking on his presidential plans, Dr. Lewers says, "The quality and delivery of medical care is being challenged as never before, and it is extremely important that the medical profession be pro-active in meeting these challenges. My goal is to ensure that the medical society represents all Maryland physicians and continues to be the patient advocate and protector of quality health care."

Erosion of the Physician-Patient Relationship

Dr. Lewers believes that one can take any number of factors or problems and relate them to the erosion of the physician-patient relationship. He uses the liability issue as one example of a wedge being driven between the doctor and the patient. "In a physician-patient relationship a patient probably would have no thought of suing me. I don't deal with patients on the basis that they might sue me. But if a new patient came to me with a headache lasting a week, I would immediately, although knowing it was not the answer, have to test to rule out both Rocky Mountain Spotted Fever and a brain tumor, just for potential liability reasons. Not only does the cost of health care go up, but also the trust inherent in the doctor-patient relationship is eroded."

Governmental and corporate invasion of medicine also is causing this relationship to crumble. For instance, another new fire recently sprang up. Medicare said it was going to send letters to patients denying coverage on the basis that the care they were given was not adequate. "Now that's as bad as maligning apple pie and motherhood. If the care is not adequate, it should not be paid for. But who determines whether it is adequate? If they charge me with rendering improper care and send that letter to a patient, no matter what kind of care I have given, they potentially are generating a law suit."

Corporate Control of Medicine

The second issue, that of corporate invasion into medicine, relates to the funding of medical care and how the alphabet soup of delivery systems (HMOs, IPAs, etc.) and even the funding of graduate medical education affect the quality of health care in this state.

The broader issue of economics encompasses the science and the art of medicine, which are very difficult to put into one package, although the old family doctor managed to combine them. Really good physicians use the art of medicine along with vast up-to-date scientific knowledge. As Dr. Lewers says, "These are the physicians we want, they are what we strive to keep. A bureaucrat doesn't understand that physician who is so busy trying to give the best care to his patients that it becomes his life, his mistress. He does not take the time to go sit in Washington to educate the bureaucrats, and they are left unaware of the quality of care element, they look at only the cost. For years organized medicine






has said: You cannot look at only that one issue."

Another economic issue is the funding of graduate medical education. Dr. Lewers questions how we can assure the continued supply of quality trained physicians. It costs $24,000 a year to go to medical school, and that is not at the most expensive medical school in the country. How will it be funded? The government is beginning to cut back their support. Who is going to be able to go to medical school? Who can afford it?

Competition

Physicians are not used to competition. They work for individual patients, and they have the best interests of the patient at heart. In the past they have not advertised. They are not accustomed to the practitioner down the street undercutting them. They are not used to Aetna, VHA, or Kaiser, who advertise and try to lure patients away. They are not yet out there marketing to keep those patients.

In Maryland, there is a real threat of a battle between hospitals and doctors. The coming year will be crucial because physicians are being forced into a competitive mode, one they never have been in and one they do not know how to handle. Hospitals in Maryland are so highly regulated they cannot compete. "We cannot permit a clash. We are in this business together: it is a team effort. Hospitals cannot function without doctors; doctors cannot function without hospitals. They have to work together. In other states hospitals and doctors are fighting tooth and nail; we cannot let it happen in Maryland," says Dr. Lewers.

Quality of Care

There is a doctor glut today. It has been shown that where there are too many doctors, the quality of care goes down. Competing for patients, physicians try to pull patients/customers in to make a living. "You want a shot, you get a shot." They want to keep customers happy. Dr. Lewers says it is not a question of whether that's the best thing for the patient, but it is best that "the patient goes out of the office satisfied. Having too many doctors is probably bad. They all try to make money, and that raises the cost of health care."

Physicians do not consider control of the number of licensed physicians an antitrust violation but rather a quality of care issue. The government and the public do not understand physicians' philosophy because their perspective is from the bill-paying end. The only thing they deal with is the cost; they do not deal with quality of care. They say, "We're not going to worry about quality care because we know you doctors always give quality care." And indeed, part of that is right: organized medicine has stood behind quality of care since the historic Flexner report (1919). "However, the government looks at us (and has trained the public to look at us) as a cost issue," Dr. Lewers comments. "We are far from a cost issue. That's a difficult concept for legislators to understand."

How do you define quality of care? Who is going to define it? Only physicians can define it. A bureaucrat who has never practiced medicine has no idea about quality care.

Issues Facing Med-Chi

The search for an Executive Director of the Faculty is the number one issue this year because there is so much to be done. The current administration, headed by Elza Davis and Joe Harrison, is functioning smoothly, but there is a great deal left undone because no one can second guess the philosophy of a new administrator.

The second important issue is two-headed: membership and unity. "We speak for not only our membership but also we represent all physicians in Maryland. There must be a unity among physicians; we must educate the physician, represent the physician, pull those physicians into a unity that they have never had—for the good of the patient and for the good of health care within the state.

"I see an erosion of health care because of the invasion from without: the cost issues that have pervaded all of medicine. The erosion also is driving a wedge between doctors."

Corporate Issues in Medicine

Traditionally, the individual pays the physician. That is the reason the fee-for-service system is so important to high quality health care. Right now, the "corporatization" of medicine is driving a wedge between physicians and their patients. The erosion started the day the patient was taken out of the billing process, the day physicians said "Send your bills to the Blues, and let them pay it." Health insurers pay the physician directly, the patient never sees the bill. "Thus, a physician is more willing to say his/her time is worth $2,000 instead of $1,000." Dr. Lewers comments, "He or she doesn't have to hand the patient a bill for $2,000 for an hour's

> ***I am responsible to the individual who hires me and pays me—that's been the American Way. In the practice of medicine, that person is the patient.***

work. Having to face the patient with the bill requires that the physician be able to justify the bill. Taking the patient out of the process has permitted unlimited growth of nonphysician bureaucrats and the corporate attitudes influencing health delivery."

If one were to compare fee-for-service doctors and employed doctors five years ago, 95 percent were fee-for-service, 5 percent were employed. It is predicted from that period through the next decade those numbers will totally reverse. Halfway through that decade, the curves are right on target: it is about 50/50 now. The practitioner who is unable to adjust is in for a rude awakening.

"Why do I need a medical society if I work for Aetna or an HMO? My responsibility is to the man who signs my paycheck." It may not be deliberate, but medical corporations are driving another wedge that could split the medical profession by forcing members away from organized medicine. Dr. Lewers says, "Most physicians would not say that one of the goals of organized medicine is to protect the health of the nation, but according to the charter of this organization, it is the number one goal. We exist to protect the health of this state. Let us not forget it."

Goals for the Year

Dr. Lewers has three major goals for his tenure:

1. To educate the public on what organized medicine really is.
2. To unify physicians to work for the common goal of the highest possible quality of health care for Maryland.
3. To work with the public and with physicians to prevent the erosion of the physician-patient relationship.

The Faculty has begun a communication campaign to inform the public about what organized medicine does for them. Physicians need to get out and meet the public. In reality, the education of the public comes down to each physician-patient encounter. "In my talks and meetings with doctors," Dr. Lewers says, "I stress that our credibility depends on the very next patient we see. Studies show that physicians are spending more time with patients. Each physician-patient encounter is longer by several minutes that it was a few years ago. There is an improvement of the relationship on a broader scale: our image with the public is up a few percentage points."

Dr. Lewers has established a senior citizens coalition. Their health care has been eroded, and they are just beginning to realize it. Despite everything being written about what the government is giving to senior citizens, Dr. Lewers says they are paying the same percent of their income as they were before Medicare. "And yet they think they have gotten so much. They have gotten nothing but a lot of interference between themselves and their physicians. We must meet with those people.

So many people are involved in health care that they interfere in the practice of medicine.

As a start, our coalition (some retired physicians, some geriatricians, and other interested parties) will meet with senior citizens.

"These are two areas where we have at least started educating the public. Any talk show, any TV or newspaper, rotary clubs, Lions clubs, anybody who wants to know what is going on in medicine," Dr. Lewers says, "we'll talk to them."

Remarking that one of the beneficial offshoots of the liability problem is that the public is seeing the medical profession in a little different light. "By necessity we



have been in the news. Our comments and our actions have been good. The public has watched and said 'hey, maybe these guys aren't all bad.'"

Dr. Lewers wants physicians to remember that no one else can practice medicine but a physician: "We can be proud of that. No one knows the inner workings of the patient better than the doctor dealing with the patient. He or she is the leader of the team."

Many doctors are depressed, discouraged, and frustrated because **everyone** seems to want to practice medicine and get a slice of the reimbursement pie. Doctors still are reimbursed at 1983 levels; their expenses are not on a 1983 basis nor are the salaries they pay their staffs. Taking inflation into account, doctors' incomes are down appreciably. They are having to find other ways to make ends meet. The public is not aware that many doctors are borrowing money to pay their malpractice premiums.

Physicians' income is diminishing. We make a good living, on a par with middle management of industry. The average physician delivering primary care is not on the same pay scale as the corporate leaders in industry.

"Every day the newspaper reveals another fire to put out. The list of things I started with is now doubled. We had malpractice, we had the Medicare demo project, we had the alphabet soup." Now, Dr. Lewers says, "we are dealing not only with the affordability but also the availability of malpractice insurance. We are dealing with the distribution of doctors: older physicians are retiring; where will the new doctors come from? The 55-year-old obstetrician who stops delivering babies today is in his/her prime: experience is still the best teacher; but that doc is to be replaced by a 28-year-old doc who may have delivered a hundred babies but has nowhere near the experience of the older physician. Further, where is the young doc going to get the $68,000 to pay malpractice insurance? That person will go into corporate medicine."

Personal Ambitions

Dr. Lewers thoroughly enjoys the practice of medicine and gets a great deal of satisfaction from what he is doing in organized medicine. Although he admits it is very difficult to have a successful marriage of the two activities, he will not give up his practice but may have to curtail it somewhat. "I'm not clear about the future at this point; my wife, my secretary, and my patients will be happy when I'm back full time, but I'll try to remain active in organized medicine.

"I'm excited about the prospects: by the problems and by the potential solutions for those problems. They are challenges, and I like a challenge. The political process always has been an interest of mine, and I have enjoyed lobbying with Med-Chi. The time element involved in lobbying is unbelievable, but I think it is necessary. I have the opportunity to express what many physicians are thinking. A lot of doctors are better at this than I am, but they just don't have the time. Since I have made the time, I owe it to myself, to my patients, and to the public to use it well. I would like to become more active in AMA, and I probably will take a shot at one of the councils of the AMA in the future. Right now, the presidency of Med-Chi along with something related to the delivery of health care is enough.

"I believe every doctor owes something to the community. Each and every physician gives in some way, although he or she may not recognize it. There is no other profession that gives of itself as doctors do through free care and the community services rendered. People take it for granted; even doctors take it for granted."

Dr. Lewers has heard rumors: "Some politicians say I am running for an office on the Eastern Shore, but I'm not. I have no interest in running for public office, but I'm flattered that they think I would even make a stab at it. I may get involved in medical affairs within a hospital, but I won't give up entirely my practice of medicine."

Life on the Eastern Shore

Born and raised in Salisbury on the Eastern Shore, "Ted" Lewers left in 1952 to attend the University of Maryland. After serving in the U.S. Army from 1954 to 1957, he completed his undergraduate, graduate, and medical studies at the University of Maryland, receiving the MD Cum Laude in June 1964.

A specialist in Nephrology and Internal Medicine, in 1971 Dr. Lewers became the first Chairman of the Governor's Commission on Kidney Diseases and was instrumental in writing regulations for the Kidney Disease Program in Maryland. Dr. Lewers was also a member of the American College of Physicians, Maryland Governor's Advisory Board from 1982 to 1986.

At one point he couldn't decide what he wanted to do. Taking the opportunities that were presented to him in academic medicine, he was the Director of Medical Education and head of the Division of Nephrology at Maryland General Hospital. He began to receive job offers from some of the medical schools. After long discussions with his wife, Pat, he decided he really missed caring for people. "I missed the physician-pa-

tient relationship. I missed being needed by people. Quite frankly, I didn't like living in the city. I missed the smell of the fresh-turned earth and the wildlife and the waterfowl. I've always been an outdoorsman, and so we decided we would go back. That was eleven years ago. It was probably one of the smartest things I have ever done. The only thing I miss from academia (teaching) I have put into my practice by doing a lot more patient education. I try to teach my patients about their diseases."

Life on the Shore is different from life in metropolitan areas of the state. One drawback of being president of Med-Chi, Dr. Lewers says, is that he has to travel to Baltimore so often. "I do enjoy these challenges, but the Eastern Shore is a special way of life. You have to live there to know what it is like."

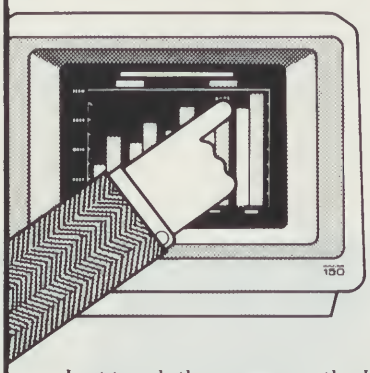
"I love to see the geese come back in the middle of September, see them on our lawn, and sit on a snowy day in December watching canvasback ducks fly. I love nature. I was a zoology major in college, and I could have spent my life in it. We have a mallard pair raising ducklings, and the turtles are laying eggs in our driveway. They dig a hole for their eggs. It is an amazing sight: with their tails they dig a perfectly cylindrical six-inch hole, lay their eggs in it, and cover it. I see deer every day. There is a huge snapping turtle in our yard. It is a way of life that few people get to know, and I thoroughly enjoy it. Life on the Shore is a little slower, it's special."

Dr. and Mrs. Lewers live beside the Tred Avon near Easton. They have three daughters: Debbie is 23 and studying physical therapy in graduate school at the University of Alabama in Birmingham; Linda, 22, is starting graduate school this fall at the University of South Carolina to specialize in exercise science; and Kim, 20, is a junior at High Point College in North Carolina and number one on the tennis team.

An active conservationist, Dr. Lewers has had to reduce some of his participation since becoming more involved in organized medicine. He is president and member of the board of the American Wildlife Heritage, member of the board of the Chesapeake Wildlife Heritage, and trustee emeritus of Ducks Unlimited. He was president of The Waterfowl Festival in Easton for four years and found it very rewarding. The festival grew appreciably: attendance rose from 12,000 to 22,000, and festival donations increased from about $30,000 to $150,000 a year. Its reputation spread from a regional festival to world-class festival. Dr. Lewers is very proud of the role he played in making it the best waterfowl festival in the world.

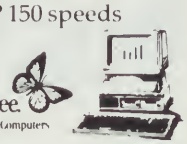






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PREVENTIVE MEDICINE ADMINISTRATION
MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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AUGUST 1986

IMPORTANT NOTICE ON NEW PERTUSSIS REGULATION

On May 19, 1986, a regulation on Pertussis and Pertussis Vaccine became effective in Maryland. This new regulation (COMAR 10.52.05) will have a direct impact on physicians who administer pertussis vaccine or who, in any way, order or approve the administration of pertussis vaccine.

In July, a special mailing was sent to pediatricians who are members of the American Academy of Pediatrics, general practice and family practice physicians who are members of the Medical and Chirurgical Faculty of Maryland, health maintenance organizations (HMOs), and hospital pediatric outpatient clinics in Maryland. This mailing contained detailed information, including guidelines and necessary forms, about complying with the regulation.

If you did not receive this special mailing and you are affected by the regulation, you should request these materials from your local health department or contact the State Immunization Program, Department of Health and Mental Hygiene, 201 W. Preston St., Baltimore, MD. 21201, (301)-225-6677.

CAT ISOLATED BECAUSE OF EXPOSURE BECOMES RABID

An unvaccinated 3-year old cat was confirmed rabid June 10th after it became ill while in isolation following exposure to a rabid raccoon on May 5th. When an unvaccinated cat (or dog) is exposed to rabies, strict isolation for 6 months is an alternative to immediate destruction of the animal.

In early June, a change in the cat was noted a few days prior to taking it to the veterinarian who had treated the cat when it was attacked in May. Based on the raccoon attack and the cat's clinical illness, it was euthanized and submitted for rabies testing. This was 36 days following the exposure to the rabid raccoon.

The cat had been isolated in an airline travel carrier placed in a wire enclosure inside a garage. Only the owner fed the cat on disposable dishes while always wearing plastic gloves. Because of the owner's regular association with the isolated pet, the attending physician elected to administer postexposure prophylaxis to the owner in absence of an established exposure to rabies.

Once rabies appears in a human or an animal, it is invariably fatal. Preventing exposure to rabies or administration of postexposure treatment in the event of exposure is essential to protect people.

This episode emphasizes the necessity of the required strict isolation of unvaccinated cats (and dogs) which have been exposed to rabies if it is not immediately euthanized. As in this case, appropriate isolation procedures prevent exposure of humans as well as assures that the animal is available for veterinary evaluation and laboratory testing if the animal becomes ill with rabies.

This cat was not vaccinated when it was exposed as required by Maryland law. If it had been currently vaccinated, a rabies booster and a 90 day restraint period would have made strict isolation unnecessary and prevented its death and treatment of the owner would have been avoided.

When the cat was directed by the health department investigator to be seen by the veterinarian, the owner erroneously indicated that the cat was currently vaccinated which complicated the case. Appropriate instructions to the owner by the attending veterinarian resulted in control measures necessary to protect the public health.

UPDATE 86: INFECTION CONTROL IN THE LONG-TERM CARE FACILITY

UPDATE 86 will be presented by the Division of Clinical Epidemiology, Assistant Directorate, Epidemiology and Disease Control, Preventive Medicine Administration, Maryland Department of Health and Mental Hygiene, in the Fall of 1986.

This **UPDATE** will focus on the special infection control issues which confront the health care worker in the long-term care setting. The goal is to highlight new areas of concern, as well as, discuss and offer solutions to persistent problems. The speakers have been selected from state, local and private agencies in order to offer a wide variety of expertise on program topics.

Four regional meetings offering identical topics have been organized as follows: All four meetings will be held the same time of day (8:15 a.m. to 3:00 p.m.).

Baltimore-Metropolitan Area:
Date: Wednesday, September 24, 1986
Place: Maryland Rehabilitation Center - Auditorium
2201 Argonne Drive
Baltimore, Maryland 21218

Western Maryland:
Date: Tuesday, September 30, 1986
Place: Washington County Health Department - Auditorium
1302 Pennsylvania Avenue
Hagerstown, Maryland 21740

Eastern Shore:
Date: Thursday, October 9, 1986
Place: Peninsula General Hospital - Auditorium
100 E. Carroll Street
Salisbury, Maryland 21801

Southern Region:
Date: Wednesday, October 15, 1986
Place: Lobby Auditorium
Executive Office Building
101 Monroe Street
Rockville, Maryland 20850

There is no registration fee, however, due to limited seating at some sites, pre-registration is required. If you have any questions, please call Pat Powers or Kim Seechuk at (301) 225-6712.

IDS CASES BY YEAR REPORTED TO MARYLAND DHMH FROM 1979 THROUGH 07 / 30 / 86

LACE OF RESIDENCE	CASES	DEATHS
ALTIMORE CITY	144	80
NNE ARUNDEL, BALTIMORE ARROLL, HARFORD, HOWARD, OUNTIES		
UBURBAN BALTIMORE	44	28
ETRO-BALTIMORE (SUB-TOTAL)	188	108
RINCE GEORGES CO.	92	59
ONTGOMERY CO.	49	25
ALVERT, CHARLES, FREDERICK, . MARY'S COUNTIES	10	4
UBURBAN WASHINGTON D.C. (SUB-TOTAL)	151	88
ASTERN SHORE	16	11
ESTERN, MD.	7	4
ARYLAND STATE TOTAL	362	211

SCOTT H. STAMFORD
AIDS PROGRAM COORDINATOR
ASSISTANT DIRECTORATE,
EPIDEMIOLOGY & DISEASE CONTROL
PHONE: (301)225-6707

GENDER	CASES	PERCENT
MALE	333	92.0 %
FEMALE	29	8.0 %

ETHNIC/ RACE BKG.		
WHITE	169	46.7 %
BLACK	179	49.4 %
HISPANIC	12	3.3 %
OTHER	362	100.0 %
TOTAL		%

AGE GROUP		
0-12	3	0.8 %
13-19	1	0.3 %
20-29	65	17.9 %
30-39	156	43.1 %
40-49	81	22.4 %
Over 50	56	15.5 %
TOTAL	362	100.0 %

ARYLAND AIDS CASES BY YEAR OF DIAGNOSIS

	CASES	DEATHS	STATUS UNKNOWN
979 - 82	9	9	0
983	33	29	2
984	78	64	
985	160	90	
986 YTD	82	19	
OTAL ------	362	211	

METRO-D.C. STATISTICS

RESIDENCE	CASES	DEATHS
Wash. D.C.	413	253
VA. SUBURBS	150	80
MD. SUBURBS	151	88
METRO-D.C.	714	421

ENTERS FOR DISEASE CONTROL NATIONAL
TATISTICS AS OF 07 / 28 / 86

EPORTED CASES 23,115 DEATHS 12,640

IDS INFORMATION AND REFERRAL LINE (BALTIMORE HERO) 301-945 AIDS
TATE WIDE TOLL FREE IS 1-800-638-6252

MARYLAND AIDS CASES BY ADULT-ADOLESCENT POPULATION GROUPS MOST AFFECTED

	Male	Female	Total	Percer
HOMOSEXUAL MEN*	180	-	180	49.7
BISEXUAL MEN	62	-	62	17.1
HOMOSEXUAL/BISEXUAL I.V. DRUG ABUSER	11	-	11	3.0
HETEROSEXUAL**	1	6	7	1.9
HETEROSEXUAL I.V. DRUG ABUSER	37	12	49	13.6
HETEROSEXUAL*** OTHER COUNTRIES	6	1	7	2.0
HETEROSEXUAL HEMOPHILIAC	4	0	4	1.1
HETEROSEXUAL TRANSFUSION RECIPIENT	14	3	17	4.7
OTHER / UNKNOWN****	17	5	22	6.1
TOTAL ADULT/ADOLESCENT	332	27	359	99.2
MARYLAND PEDIATRIC AIDS CASES				
BORN TO MOTHER WITH AIDS OR "AT RISK" FOR AIDS	1	2	3	0.8
HEMOPHILIAC				
TRANSFUSION RECIPIENT				
OTHER /UNKNOWN				
TOTAL PEDIATRIC				
GRAND TOTAL	333	29	362	100.

* Includes 1 person from other countries

** Sexual partner either diagnosed with AIDS or identified as person "at risk" for AIDS.

*** Denotes individuals who have immigrated to the United States from countries where AIDS is endemic.

**** Includes 3 cases who died prior to interview, cases with unknown risk factor and cases currently uncer investigation

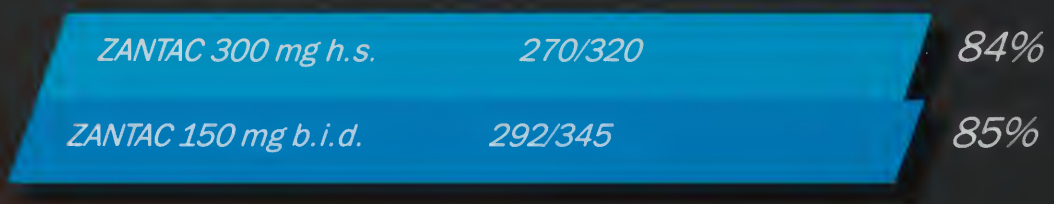
CONTROL ACID RAIN

with once-a-night h.s. therapy for active duodenal ulcers

Now, one tablet at bedtime

Controls nocturnal acid to relieve pain and heal duodenal ulcers

Heals active duodenal ulcers after 4 weeks in most patients*[1]



In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.[1]

Zantac® 300

ranitidine HCl/Glaxo 300 mg tablets

Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications which decrease gastric acidity are administered.



*It is not known exactly how much acid inhibition is needed to heal ulcers.

Glaxo / ROCHE

See next page for references and Brief Summary of Product Information.

IN ACTIVE DUODENAL ULCERS

Once-a-night h.s. therapy controls acid rain

Zantac® 300
ranitidine HCl/Glaxo 300 mg tablets

References: 1. Data available on request, Glaxo Inc. **2.** Ireland A, Colin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2:274-275. **3.** Colin-Jones DG, Ireland A, Gear P, et al: Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of active duodenal ulcer. Most patients heal within four weeks. Studies available to date have not assessed the safety of ranitidine in uncomplicated duodenal ulcer for periods of more than eight weeks.
2. Maintenance therapy for duodenal ulcer patients at reduced dosage after healing of acute ulcers. No placebo-controlled comparative studies have been carried out for periods of longer than one year.
3. The treatment of pathological hypersecretory conditions (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of active, benign gastric ulcer. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated. Studies available to date have not assessed the safety of ranitidine in uncomplicated, benign gastric ulcer for periods of more than six weeks.
5. Treatment of gastroesophageal reflux disease. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy.
2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSAGE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

OVERDOSAGE: There is no experience to date with deliberate overdosage. The usual measures to remove unabsorbed material from the gastrointestinal tract, clinical monitoring, and supportive therapy should be employed.

Studies in dogs receiving doses of ZANTAC® in excess of 225 mg/kg/day have shown muscular tremors, vomiting, and rapid respiration. Single oral doses of 1,000 mg/kg in mice and rats were not lethal. Intravenous LD_{50} values in rat and mouse were 83 and 77 mg/kg, respectively.

DOSAGE AND ADMINISTRATION: Dosage Adjustment for Patients with Impaired Renal Function: On the basis of experience with a group of subjects with severely impaired renal function treated with ZANTAC®, the recommended dosage in patients with a creatinine clearance less than 50 ml/min is 150 mg every 24 hours. Should the patient's condition require, the frequency of dosing may be increased to every 12 hours or even further with caution. Hemodialysis reduces the level of circulating ranitidine. Ideally, the dosage schedule should be adjusted so that the timing of a scheduled dose coincides with the end of hemodialysis.

HOW SUPPLIED: ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

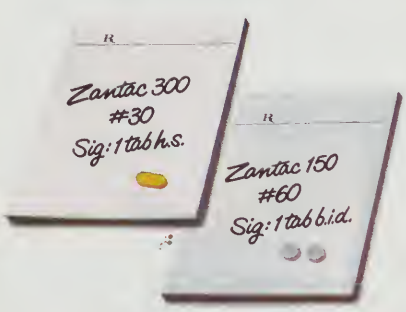
ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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Research Triangle Park, NC 27709

Now...two effective regimens to treat active duodenal ulcers



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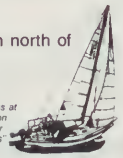
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PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of the State of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to the Physician Placement Service, 1211 Cathedral St., Baltimore, MD 21201; telephone 1-301-539-0872.

Physicians wishing to locate in Maryland are invited to submit a resumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities which might be available in Maryland.

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SUPPORTIVE

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Medical and Chirurgical Faculty of the State of Maryland

188th Annual Session—Baltimore Convention Center

First Meeting, April 16, 1986 (317th Meeting) Minutes, House of Delegates

The 317th meeting, first of the 188th Annual Session of the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland was called to order at 9:30 a.m., the President, J. D. Drinkard MD and Secretary, Bernard S. Karpers, Jr., MD being present.

The following delegates (or alternates) were registered as being in attendance; an asterisk indicates an alternate delegate:

Allegany County
Victor R. Felipa
*Leslie R. Miles, Jr.

Anne Arundel County
*William Cassidy
Allen C. Egloff
Michael Jaworski
Hilary T. O'Herlihy
Jorge B. Ramirez

Baltimore City
Artistides C. Alevizatos
Timothy D. Baker
Donald M. Barrick
James E. Bell
*Joseph I. Berman
Richard Berkowitz
*Mack Bonner, Jr.
Stephen M. Busky
*Joel M. Cherry
Gaylord L. Clark, Jr.
Vincent D. Fitzpatrick
Marion Friedman
Stanford M. Goldman
Susan R. Guarnieri
Michael G. Hayes
John H. Hirschfeld
James M. Hitzrot, II
Joseph H. Hooper
Thomas E. Hunt
Jeanne S. Kraus
John B. MacGibbon
Donald W. Mintzer
John H. Mulholland
*Richard S. Mumford
Albert Nahum
Samuel I. O'Mansky
William F. Renner
Gary L. Rosenberg
Benjamin Rothfeld
Edward L. Suarez-Murias
*Bernard R. Shochet
George Taler
Thomas E. Van Metre, Jr.

Baltimore County
Thomas E. Allen
Harold B. Bob
Louis C. Breschi
John W. Buckley
Esther Edery
Clarence W. Gehris
A. H. Ghiladi
*Deusdedit Jolbitado
Paul G. Koukoulas
John M. Krager
Herbert J. Levickas
Louis J. Pratt, Jr.
William Reichel
Alan G. Scott
Margaret L. Sherrard
John F. Strahan
Margret Zassenhaus

Calvert County
Joseph Fastow
David W. Fricke

Carroll County
Alva S. Baker

Dorchester County
Paul A. Stagg

Garrett County
Herbert H. Leighton

Harford County
Rose Mary H. Bonsack
Philip W. Heuman
Ben E. Oteyza

Howard County
Thomas F. Herbert
Elwood LaBrosse
*Charles J. Lancelotta

Kent County
Harry P. Ross

Montgomery County
Benjamin Avrunin
Carol L. Bender
Charles H. Ligon
Ralph E. Longway
Jonathan S. Lyons
Edward S. Mehlman
Margaret T. Snow
Naor U. Stoehr
Thomas M. Wilson

Prince George's County
Mirza Baig
Stanley A. Forster
Andres C. Lara
Reynaldo Lee-Llacer
Zorayda Lee-Llacer
Ricardo Longoria
Madhu K. Mohan
David N. Robb
*Maximo Singer
Elliece S. Smith
*Kempanna Sudhakar

Queen Anne's County
John R. Smith, Jr.

Talbot County
Alfred A. Leszczynski

Washington County
Robert W. Chambers
Edward W. Ditto, III

Wicomico County
Alex Azar
*Hilda Houlihan
*Aubrey C. Smoot

Worcester County
Federico G. Arthes

Council
Albert M. Antlitz
Raymond M. Atkins
Benjamin Del Carmen
John M. Dennis
Michael R. Dobridge
J. D. Drinkard
James T. Estes
Hubert L. Fiery
Arthur L. Gudwin
Frederick J. Hatem
John H. Hebb
Bernard S. Karpers, Jr.

Leon E. Kassel
Robert G. Kindred
Donald T. Lewers
George S. Malouf
J. David Nagel
Hiroshi Nakazawa
Charles F. O'Donnell
Benjamin S. Pecson
Sherman S. Robinson
Donald J. Roop
Roland T. Smoot
Joseph Snyder
Albert J. Strauss
John B. Umhau
Baltasar B. Velez
Karl H. Weaver
Israel H. Weiner
Kennard L. Yaffe
Jose M. Yosuico

Board of Medical Examiners
Arthur T. Keefe, Jr.

Past Presidents
DeWitt E. DeLawter
Karl F. Mech
Arthur G. Siwinski

Also present were staff personnel.

Invocation

Leslie R. Miles, Jr., MD, Chairman of the Committee on Medicine and Religion, delivered the invocation.

Greetings

The President introduced the Mayor of Baltimore, William Donald Schaefer, who gave greetings to the Delegates.

John Sargeant Memorial

The Secretary read the following resolution:

John Sargeant CAE

1920–1985

Whereas, John Sargeant, the first Executive Director of the Medical and Chirurgical Faculty of the State of Maryland, died November 25, 1985 at age 65;

Whereas, Mr. Sargeant, for over 25 years an extraordinary leader in medical matters in Maryland, originated many projects that gained legislative approval, including the concept of a separate disciplinary body for physicians in which the profession itself plays a significant part;

Whereas, Mr. Sargeant served the Faculty uniquely, both as Chief Executive Officer and Chief Lobbyist, setting an example of credibility, integrity, and efficiency admired by all members of the State Legislature and Congressional delegation with whom he came in contact;

Whereas, Mr. Sargeant was instrumental in the establishment of Faculty committees to work with local and state agencies, thereby setting models of cooperation between private and public organizations;

Whereas, Mr. Sargeant, as a health advocate and opinion maker, had a true sensitivity to the needs of both his constituency and the community, and was known throughout Maryland as "the physicians' doctor";

Whereas, Mr. Sargeant inspired and encouraged both his physician members and staff to seek excellence in their careers by setting a personal example of excellence;

Whereas, Mr. Sargeant was sensitive to the concerns of his employees and friends and was always available for consultation and/or advice; and

Whereas, Mr. Sargeant was an affiliate of the American Medical Association and a member of the American Association of Medical Society Executives, served on the Advisory Board to the American Medical Association's Executive Vice President (1977–1981), as well as the AMA's Public Relations Advisory Committee, among other voluntary services; therefore be it

Resolved, That the House of Delegates of the Medical and Chirurgical Faculty express to John Sargeant's widow, Jeanne, and to his family, its respect and deep sorrow for the loss of a valued colleague.

A memorial tribute to John Sargeant was held. Remarks were given by J. D. Drinkard MD, J. Parran Jarboe MD, who gave a physician's memories, Honorable Larry Young who recounted a legislator's memories, Constance Townsend who gave an employee's memories and presented a portrait of Mr. Sargeant to the members of the Faculty from the staff of the Faculty followed by Mrs. Jeanne B. Sargeant who gave family memories. The resolution was unanimously adopted.

Announcements

The President made certain announcements, advising of various rules for conduct of House business, as well as information on various scientific and social functions scheduled for the session.

Semiannual Minutes

The minutes of the Semiannual Session of the House of Delegates held on Saturday, September 28, 1985 in Baltimore, MD having been distributed to all members as approved by the Executive Committee, were presented to the House.

Guests

The President introduced the following guests to the House:

Charles M. Caravati, Jr., MD, President, Medical Society of Virginia

David Z. Morgan MD, President, West Virginia State Medical Association

Necrology

The members of the House of Delegates rose in respect for deceased colleagues as the Secretary read the following necrology:

Allegany County

William R. Wolverton MD	July 13, 1984

Baltimore City

Warde B. Allan MD	January 13, 1985
Salvatore H. Barranco MD	February 28, 1986
Martin J. Birnbaum MD	March 16, 1985
Jean M. Bisco MD	August 1, 1985
Ipolitas B. Bronushas MD	May 28, 1985
Joseph V. Castagna MD	September 23, 1985
Louis F. Cleary MD	April 15, 1986
Harold C. Dix MD	October 21, 1985
William C. Dunnigan MD	December 2, 1985
Elliott R. Fishel MD	May 12, 1985
Hyman P. Friedman MD	May 24, 1985
Carlton I. Halle MD	November 7, 1985
Walter O. Jahrreis MD	August 6, 1985
Edwin B. Jarrett MD	August 21, 1985
Robert W. Johnson, III, MD	October 3, 1985
Andrew Kunkowski MD	October 20, 1985
Milton C. Lang MD	February 6, 1985
Byruth Lensen-Lambros MD	June 26, 1985
Isadore H. Maseritz MD	January 31, 1985
John Harold Miller MD	April 19, 1985
Myron J. Myers MD	May 18, 1985
Ralph Stewart Penner MD	September 30, 1985
Thomas E. Roach MD	July 23, 1985
George E. Wells, III, MD	November 14, 1985
William H. Woody MD	July 25, 1985
William G. Helfrich MD	April 6, 1986
Russell H. Morgan MD	February 22, 1986
C. Lee Randol MD	February 10, 1986

Baltimore County

Robert H. Allison MD	May 13, 1985
Frederick J. Balsam MD	September 29, 1985
Thomas N. Ferciot MD	December 29, 1985
Anthony J. Thomas MD	October 20, 1985
James McCosh MD	January 18, 1986
Clifford F. Hudson MD	June 22, 1985
Norman Louis Miller MD	April 1, 1986

Carroll County

Ellis S. Margolis MD	April 27, 1985

Charles County

David R. Del Rosario MD	July 18, 1985
Saad Kassem MD	March 23, 1986

Dorchester County

John Mace, Jr., MD	February 14, 1986

Montgomery County

Edith Petrie Brown MD	June 14, 1985
Young C. Hong MD	June 15, 1985
John O. Robben MD	August 14, 1985
William B. Wardrop MD	May 7, 1984

Prince George's County

Pasquale DeFelice MD	December 7, 1985
Leo W. Dufault MD	September 6, 1985
Joseph J. McDonald MD	December 1, 1985

St. Mary's County

William H. Patrick MD	January 3, 1986

Talbot County

William D. Noble MD	June 11, 1985

Washington County

John H. Hornbaker MD	February 20, 1986

Wicomico County

Bob Freundlich MD	January 6, 1986

Affiliates

Seymour Greenbaum MD	July 2, 1985
Frank D. Hauber MD	no date available
E. Margaret Sullivan MD	September 10, 1985

Resident

Ronald B. Williams MD	March 8, 1986

Memorial Resolution—H. Gray Reeves MD

The secretary read the following memorial resolution regarding H. Gray Reeves MD which was adopted unanimously:

H. Gray Reeves MD

1927–1985

Whereas, H. Gray Reeves MD, born in North Carolina, a graduate of Wake Forest College in 1947, received his Doctorate of Medicine from the University of Maryland in 1951, formalized his general surgical training at University Hospital in 1958, and committed himself to the private practice of surgery in Salisbury, Maryland until the time of his death on October 20, 1985;

Whereas, He served his country with honor as a captain in the United States Air Force from 1955 to 1957;

Whereas, He was an active member of the medical staff of the Peninsula General Hospital Medical Center, serving as chief of the Division of General Surgery and chief of the Department of Surgery, as a member of the Board of Trustees for ten years and as the Board's first physician chairman from 1983 until 1985;

Whereas, He gave of himself beyond limits in the service of his patients, his colleagues and for the benefit of his community and its surrounding areas;

Whereas, He was a member of distinction in his church and the numerous civic and professional socie-

ties with which he was affiliated; and

Whereas, His absence by his untimely death will be a grievous loss to his family, the medical profession and the public; therefore, be it

Resolved, That this House of Delegates of the Medical and Chirurgical Faculty on April 16, 1986 adopts this resolution with an expression of deep sorrow on the death of Dr. Reeves, a member from Wicomico County; and

Resolved, That this resolution be spread upon the minutes of this meeting and a copy by sent to his wife, Mrs. Shirley Ward Reeves, to his parents, Mr. and Mrs. Henry Gray Reeves, Sr., and to his children in gratitude for the eminence of his life.

Memorial Resolution—Carlton I. Halle, MD

The Secretary read the following memorial resolution regarding Carlton I. Halle MD which was adopted unanimously:

Carlton I. Halle MD

1933–1985

Whereas, Carlton I. Halle MD, died on Thursday, November 7, 1985, after a long illness;

Whereas, Dr. Halle exemplified the ideals of the caring physician and was held in high esteem by both colleagues and patients alike;

Whereas, He served the Baltimore City Medical Society as a member of the Professional Education Committee from 1979 through 1985 and a delegate to Med-Chi from 1980 through 1985;

Whereas, He served as a member of the Faculty's Liaison Committee with the Department of Health and Mental Hygiene from 1981 through 1984; and

Whereas, His absence will be felt by the community; therefore be it

Resolved, That the Medical and Chirurgical Faculty's House of Delegates on Wednesday, April 16, 1986, unanimously adopts this resolution in Dr. Halle's memory; and be it further

Resolved, That a copy of this resolution be sent to his wife, Josephine, and his daughters, Karen, Lauren, and Susan.

Fifty-Year Members

Presentation of Fifty-Year certificates and pins by the President to the following members took place with the awards being mailed to those unable to attend:

Baltimore City
John C. Dumler MD
William L. Fearing MD
Walter L. Kilby MD
John W. Machen MD
Helen I. Maginnis MD
Daniel S. Shanahan MD

Baltimore County
Charles H. Reier MD

Caroline County
Harold B. Plummer MD

Kent County
Robert W. Farr MD

Montgomery County
William D. Aud MD

Washington County
Edgar T. Campbell MD

Emeritus Members

Upon motion of Leon E. Kassel MD, Chairman of Council, the following members were elected to Emeritus Membership in the Faculty, each having received the recommendation of their component societies and the Council:

Anne Arundel County
Manning W. Alden MD, Annapolis

Baltimore City
Michael K. Finegan MD, Towson
Sylvan D. Goldberg MD, Baltimore
Virginia Huffer MD, Baltimore
Michael Liteanu MD, Baltimore
William D. Lynn MD, Baltimore
Charles C. MacMinn MD, Baltimore
Carlos G. Miller MD, Timonium
Lydia L. Pauli MD, Baltimore
Stuart D. Rizika MD, Baltimore
James Russo MD, Baltimore
Calbert T. Seebert MD, Baltimore
John O. Sharrett MD, Baltimore
Albert J. Wiess, MD, Baltimore
John Phillips White, III, MD, Baltimore
Thomas L. Worsley MD, Baltimore
Latimer G. Young MD, Baltimore
Theodore H. Wilson MD, Baltimore

Baltimore County
Raymond M. Cunningham MD, Baltimore
William P. Englehart MD, Phoenix
Alfred S. Garrison MD, Baltimore
John A. Mitchell MD, Baltimore
Richard E. Hoover MD, Baltimore
John S. O'Connor MD, Baltimore

Charles County
George Norman Schultz MD, La Plata

Howard County
Anthony J. Young MD, Ellicott City

Montgomery County
Lenore A. Bajda MD, Rockville
Frances E. Brennecke MD, Rockville

John E. Cassidy MD, Bethesda
Eugene F. Finegan MD, Bethesda
William G. Hall MD, Potomac
Chi-Chin Huang MD, Silver Spring
Frank Y. Jaggers MD, Rockville
Manuel P. Landman MD, Bethesda
Henry P. Laughlin MD, Union Bridge
A. A. Levine MD, Silver Spring
Robert E. McCullough MD, Chevy Chase
Robert R. Montgomery MD, Bethesda
Eugene A. Rosenberger MD, Silver Spring
George Sharpe MD, Kensington
Benjamin Stein MD, Bethesda
Ruth A. Vankai MD, Silver Spring
Edwin H. Weitzen MD, Silver Spring

Prince George's County
William B. Hagan MD, Hyattsville
John S. Haught MD, Riverdale

Talbot County
Arthur B. Cecil MD, Easton

Wicomico County
Paul G. Cayaves MD, Salisbury

Worcester County
Hunter Mann MD, Ocean City

Affiliate
Yung-Tsing Wong MD, Rotonda West, Florida

Resolution on Assessment

Dr. Kassel, on behalf of the Council and in accordance with Article II, Section 7 of the Bylaws, offered the following resolution which was adopted with one dissenting vote:

Resolved, That a one-time assessment of $100 be levied on all Active Members of the Faculty (effective for the year 1986) for the purpose of providing funds to the Building Project for completion of the renovation of School #49, the new Faculty headquarters facility.

Treasurer's Report

Jose M. Yosuico MD, Treasurer, made a brief report on the 1986 budget as adopted by Council which was distributed to all members prior to the meeting.

AMA-ERF Checks Presented

Checks in the amount of $30,241 in unrestricted funds, and $5,393 in restricted funds for medical student assistance were presented to John M. Dennis MD, Dean of the University of Maryland School of Medicine; $22,935 in unrestricted funds and $3,350 in restricted funds for medical student assistance were presented to Henry M. Seidel MD, Associate Dean for Student Affairs, the Johns Hopkins University School of Medicine; and $2,990 in unrestricted funds to Jay P. Sanford MD, President of the Uniformed Services University of the Health Sciences.

A. H. Robins Award

The President presented the A. H. Robins Award for Community Service to Margret Zassenhaus MD who addressed the House with a moving acceptance speech. Dr. Zassenhaus was given a standing ovation.

Certificates of Appreciation

The President presented Certificates of Appreciation to the following committee chairmen:

George Malouf MD, Chairman of the Ad Hoc Committee on the New Faculty Building

John Hirschfeld MD, past Chairman of the Committee on Alcoholism and Chemical Dependency after 24 years of dedicated service

Abraham Schneidmuhl MD, past Co-Chairman of the Committee on Alcoholism and Chemical Dependency after 5 years of dedicated service

Media Awards

The President then presented awards for the First Annual Media Awards Program (which include a plaque and a $1,000 cash donation to the medical charity of the recipients choice) for the following categories:

Print Jon Franklin, *Evening Sun*, for "Brave New Heart: A Transplant Patient's Story." Cash award goes to Maryland Institute for Emergency Medical Services Systems. (Ernest Imhoff, Senior Assistant Managing Editor of the Evening Sun accepted the award.)

TV Jack Bowden, WMAR-TV, for his 3-part series, "Turning Back The Clock." Bowden selected The Gerontology Research Center Gift Fund to receive his award. (Wayne Lynch, Managing Editor, WMAR-TV, accepted the award.)

Radio Michael Summers, WFBR Radio, for a 30-minute documentary entitled, "Shock Trauma: The Golden Hour." The Maryland Institute for Emergency Medical Services Systems to receive his cash award. (Mike Golden, WFBR, accepted the award for Summers.)

The President then presented the Citations of Merit in the Media Awards Program to:

Print Patrick Gilbert, *Evening Sun* (Ernest Imhoff accepted); Carol Ukens, *Messenger & Towson Times*; Ray Feldman, *Towson Times*; and Sue Miller, *Evening Sun* (Ernest Imhoff accepted)

Television Tobie Marsh, WMAR-TV (Wayne Lynch accepted)

Photo Contest

The President announced winners of the Photo Contest:

Color Category 1st place, Jerrold Post MD, 2nd place, David Paul MD

Black & White Category 1st place, Nancy O. Whitley MD, 2nd place, Edgar Campbell MD

Appreciation to Anne Arundel General Hospital

The President then presented a Citation of Appreciation to Anne Arundel General Hospital for assistance in the operation of the First Aid Room in Annapolis for the past 23 years. Carl Brunetto, Administrator of Anne Arundel General Hospital accepted the citation.

Nominating Committee Report

George Malouf MD, Immediate Past-President, on behalf of the Nominating Committee, presented the following slate of officers to the House of Delegates:

President-elect
Leon E. Kassel, Baltimore, Baltimore City
(President-elect 1986–87)
(President 1987–88)

First Vice-President
Reynaldo L. Lee-Llacer, Clinton, Prince George's County

Second Vice-President
Leslie R. Miles, Jr., Lonaconing, Allegany County

Third Vice-President
Hilary T. O'Herlihy, Glen Burnie, Anne Arundel County

Secretary
Raymond M. Atkins, Baltimore, Baltimore City

Treasurer
Jose M. Yosuico, Laurel, Baltimore City

Committee on Scientific Activity (6-year term)
Gerhard Schmeisser, Baltimore, Baltimore City

Library and History Committee (5-year term)
John W. Buckley, Timonium, Baltimore County

Finney Fund Committee (5-year term)
Daniel C. Finney, Baltimore, Baltimore City

Board of Medical Examiners (4-year term)
Daniel I. Welliver, Westminster, Carroll County
(July 1, 1986—June 30, 1990)
Benjamin S. Pecson, Forestville, Prince George's County
(July 1, 1986—June 30, 1990)

Delegates to the AMA
Albert M. Antlitz, Baltimore, Baltimore City
(January 1, 1987—December 31, 1989)
Roland T. Smoot, Baltimore, Baltimore City
(January 1, 1987—December 31, 1989)

Alternate Delegates to the AMA
Philip L. Schneider, Laurel (Resident)
(January 1, 1987—December 31, 1989)
Vacancy (Student)
(January 1, 1987—December 31, 1989)

The following nomination was made from the floor:
President-elect: Bernard S. Karpers, Jr., MD, Towson

Tellers Appointed

The President appointed the following physicians to act as tellers at the General Meeting for the election of the Board of Medical Examiners: Aris T. Allen MD, Chairman; Michael Dobridge MD, Kennard Yaffe MD, and J. David Nagel MD.

The President announced the election of the Board of Medical Examiners to take place immediately following adjournment of the House of Delegates at the General Meeting and urged all members to remain for the meeting. He also announced that election of the balance of the slate to take place as the first item of business at the session scheduled for Friday, April 18, at 2 p.m.

The meeting was adjourned at 11:33 a.m. by unanimous consent.

***BERNARD S. KARPERS, JR.,* MD**
Secretary

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Second Meeting, April 18, 1986 (318th Meeting)
Minutes: House of Delegates

The 318th meeting, second of the 188th Annual Session of the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland was called to order at 2:05 p.m., the President, J. D. Drinkard MD, and the Secretary, Bernard S. Karpers, Jr., MD, being present.

The following delegates (or alternates) were registered as being in attendance; an asterisk indicates an alternate delegate:

Allegany County
Victor R. Felipa
Wally S. Hijab
Elmaslias Menchavez
Leslie R. Miles, Jr.

Anne Arundel County
*William Cassidy
Michael Jaworski
Hilary T. O'Herlihy

Baltimore City
*Ian R. Anderson
Aristides C. Alevizatos
Timothy D. Baker
Donald M. Barrick
James E. Bell
Richard Berkowitz
Brian D. Briscoe
Stephen M. Busky
Gaylord L. Clark, Jr.
Vincent D. Fitzpatrick
Marion Friedman
Robert B. Goldstein
Susan R. Guarnieri
Michael G. Hayes
John H. Hirschfeld
James M. Hitzrot, II
*Gerald A. Hofkin
Joseph H. Hooper
Thomas E. Hunt
Jeanne S. Kraus
John B. MacGibbon
Donald W. Mintzer
Albert Nahum
Samuel I. O'Mansky
William F. Renner
Gary L. Rosenberg
Benjamin Rothfeld
*Bernard R. Shochet
*Ruth H. Singer
Edward L. Suarez-Murias
George Taler
Thomas Van Metre, Jr.

Baltimore County
Thomas E. Allen
Harold B. Bob
Louis C. Breschi
John W. Buckley
Esther Edery
*Frank A. Faraino
*Maurice B. Furlong
A. H. Ghiladi
Paul G. Koukoulas
John M. Krager
Herbert J. Levickas
Louis J. Pratt, Jr.
William Reichel
Allan G. Scott
Margaret L. Sherrard
John F. Strahan
*Guillermo Vanegas
Benjamin K. Yorkoff
Margret Zassenhaus

Calvert County
Joseph Fastow

Carroll County
Alva S. Baker

Cecil County
Henry J. Farkas
Andrew P. Fridberg

Harford County
Rose Mary H. Bonsack
Philip W. Heuman
Ben E. Oteyza

Howard County
Otto Beyer
Thomas F. Herbert
Elwood La Brosse

Kent County
Harry P. Ross

Montgomery County
Carol L. Bender
Charles H. Ligon
Jonathan S. Lyons
Edward S. Mehlman
*Susan W. Owens
Margaret T. Snow
Naor U. Stoehr

Prince George's County
Mirza Baig
Stanley A. Forster
Andres C. Lara
Reynaldo Lee-Llacer
Zorayda M. Lee-Llacer
Ricardo Longoria
Madhu K. Mohan
David N. Robb
*Elie A. Sayan
Elliece S. Smith
*William A. Warren
*Frederick Wilhelm

Queen Anne's County
John R. Smith, Jr.

St. Mary's County
J. Roy Guyther

Talbot County
Alfred A. Leszczynski

Washington County
Robert W. Chambers

Wicomico County
Alex Azar
*Hilda Houlihan
*Aubrey C. Smoot, Jr.

Council
Albert M. Antlitz
Raymond M. Atkins
Thomas C. Cimonetti
Benjamin Del Carmen
Michael R. Dobridge
J. D. Drinkard
James T. Estes
Arthur L. Gudwin
Frederick J. Hatem
John A. Hawkinson
John H. Hebb
Bernard S. Karpers, Jr.
Leon E. Kassel
Robert G. Kindred
Leon R. Levitsky
Donald T. Lewers

George S. Malouf
J. David Nagel
Hiroshi Nakazawa
Charles F. O'Donnell
Benjamin S. Pecson
Sherman S. Robinson
Roland T. Smoot
Joseph Snyder
Albert J. Strauss
John B. Umhau
Baltasar B. Velez
Israel H. Weiner
Kennard Yaffe
Jose Yosuico

Board of Medical Examiners
Arthur T. Keefe, Jr.

Past Presidents
Karl F. Mech

Also present were staff personnel.

Board of Medical Examiners Election

The President announced the results of the election of the Board of Medical Examiners conducted on Wednesday, April 16, 1986 at the General Membership Meeting following the first session of the House of Delegates.

Elected to four year terms:
Daniel I. Welliver, Westminster
Arthur T. Keefe, Jr., Chestertown

Faculty Elections

There being two nominations for the office of President-elect, the President read to the members the By-laws provision requiring a secret ballot. All remaining positions being uncontested, by unanimous consent the ballot was dispensed with and the following were elected by unanimous voice vote:

First Vice-President
Reynaldo L. Lee-Llacer, Clinton, Prince George's County
Second Vice-President
Leslie R. Miles, Jr., Lonaconing, Allegany County
Third Vice-President
Hilary T. O'Herlihy, Glen Burnie, Anne Arundel County
Secretary
Raymond M. Atkins, Baltimore, Baltimore City
Treasurer
Jose M. Yosuico, Laurel, Baltimore City
Committee on Scientific Activity (6-year term)
Gerhard Schmeisser, Baltimore, Baltimore City
Library and History Committee (5-year term)
John W. Buckley, Timonium, Baltimore County
Finney Fund Committee (5-year term)
Daniel C. Finney, Baltimore, Baltimore City
Delegates to the AMA
Albert M. Antlitz, Baltimore Baltimore City (January 1, 1987–December 31, 1989)
Roland T. Smoot, Baltimore, Baltimore City (January 1, 1987–December 31, 1989)
Alternate Delegates to the AMA
Philip L. Schneider, Laurel (Resident) (January 1, 1987–December 31, 1989)
Vacancy (Student) (January 1, 1987–December 31, 1989)

Tellers Appointed

The President appointed tellers for the election:
Arthur T. Keefe, Jr., MD, Chairman, and Doctors Aubrey Smoot and Michael Dobridge

Delegates were advised of the balloting arrangements, and the Preident read the names of the following nominees for president-elect:
Bernard S. Karpers, Jr., MD, Towson
Leon E. Kassel MD, Baltimore City

The President declared the polls open and by unanimous consent, declared a short recess at 2:15 p.m. for the purpose of voting.

Introduction of Guests

The meeting was reconvened at the call of the President at 2:35 p.m., and the President introduced the following invited guests to those in attendance, each making brief remarks:
John H. Benge MD President, Medical Society of Delaware
Ralph J. Fioretti MD, President, New Jersey Medical Society
R. William Alexander MD, President, Pennsylvania Medical Society

The president introduced James E. Davis, MD, Speaker of the House of Delegates of the American Medical Association who addressed the delegates on the latest federal activity with regard to the budget reconciliation, progress of the relative value scale project, and other major activity on the national level.

Dr. Davis was followed by Jerald R. Schenken MD, member of the Board of Trustees of the American Medical Association who gave brief remarks to the Delegates.

Tellers' Report

At this point the President asked for an indication that all those who desired had cast a ballot and, hearing no objection, declared the polls closed. He then recognized Dr. Keefe, Chairman of the tellers to make a report. Dr. Keefe made the following report:

Number of votes cast - 122
needed to elect 62
Dr. Kassel received 69 votes
Dr. Karpers received 53 votes

The President declared Dr. Kassel elected to the position of President-elect.

MMPAC Report

J. Andrew Sumner MD, Chairman of the Maryland Medical Political Action Committee made a report to the House of Delegates, which will be published in the annual reports.

Auxiliary Report

Mrs. Kathy Karpers, Auxiliary President, made a report to the House of Delegates, which will be published in the annual reports. Upon conclusion of the report, Mrs. Karpers received a standing ovation from the Delegates.

Townsend Retirement

The President then recognized Mrs. Constance Townsend, Assistant to the Executive Director of the Faculty for brief remarks. She will be retiring soon, after nearly 22 years of service.

Building Fund Contribution

Mrs. Mildred Taylor, Chairman of the Building Fund for the Auxiliary and Zorayda Lee-Llacer MD from the Prince George's County Medical Society presented checks to the President for the building fund in the following amounts: $3,000 from the Prince George's County Medical Society and $5,000 from the Med-Chi Auxiliary

New Business

The President asked for new business.

Donald W. Mintzer MD requested that Blue Cross/Blue Shield be asked to publish lists not only of participating physicians but also of all physicians paid by the insurance company.

Resolution on Professional Liability Insurance

Alva Baker MD requested permission to present a resolution from the Carroll County Medical Society. Upon receiving approval of more than 2/3 of the Delegates voting for introduction of the resolution, Dr. Baker presented the following resolution, which was adopted unanimously:

Whereas, The crisis surrounding malpractice insurance in the State of Maryland (which accelerated precipitously in the early 1970s) has continued to grow relentlessly with ever-increasing premiums and restrictions, and

Whereas, In response to the unavailability of professional liability insurance the Medical Mutual Liability Insurance Society of Maryland was formed for the express purpose of providing such insurance to the physicians of the State of Maryland, and

Whereas, The Medical Mutual Liability Insurance Society of Maryland is now refusing to write professional liability insurance for some physicians who are duly licensed for the practice of medicine and surgery in the State of Maryland, thus forcing such physicians either to practice without the benefit of professional liability insurance or to leave the State of Maryland, be it therefore

Resolved, That the Medical and Chirurgical Faculty of the State of Maryland hereby recognizes the reoccurrence of the unavailability of professional liability for physicians in this State, and be it further

Resolved, That the Medical and Chirurgical Faculty shall investigate the circumstances surrounding this action by the Medical Mutual Liability Insurance Society of Maryland and shall take whatever steps are possible and necessary to assure the availability of professional liability insurance to any physician who is duly licensed for the practice of medicine and surgery in the State of Maryland.

The President advised Councilors of a meeting of the new Council to convene immediately at the close of the House. He presented the gavel to the incoming President, Donald T. Lewers MD who addressed the Delegates. The text of the address is included in the annual reports of the Faculty.

The President expressed his appreciation to the House for the privilege of serving as President and by unanimous consent, declared the meeting adjourned *sine die* at 4:05 p.m.

BERNARD S. KARPERS, JR., MD
Secretary

Acceptance Speech to the House of Delegates
April 25, 1986

Thank you for the opportunity to represent the physicians of Maryland as the President of the Medical and Chirurgical Faculty of the State of Maryland. I also would like to thank the Society for the opportunity to serve as a lobbyist for the last ninety days in Annapolis. It was a tremendous experience learning what the legislators are thinking about physicians as well as learning the inner workings of the Medical Faculty. This experience was so exceptional I have thought perhaps each President-elect should have a similar assignment.

To set the tone for the next year, let me try to bring into perspective some of the issues discussed here under the theme of the American Health Care Revolution as they relate to Maryland. Medicine, the delivery of health care, and organized medicine are being challenged as they never have been in the history of medicine not only across the United States but also here in Maryland.

Within Med-Chi, we face numerous problems in the coming year. Physician unity and Med-Chi membership top the list. Although competition in the marketplace is a stranger to physicians, it is here and cannot be ignored. The maintenance of high quality health care always has been foremost in the minds of physicians and organized medicine, and it must remain so. Maryland has a real opportunity to work with the Medicare Capitation Demonstration project of Blue Cross/Blue Shield. Currently we oppose this project, but I believe the medical society must rethink this position. While we will continue to have the liability battle before us, a looming problem not yet faced (at least by Med-Chi) is the funding of medical education. Last, but not least, is the immediate problem of the selection of a new CEO.

The Medical Society

Med-Chi is at a crossroads that we have not seen for a quarter of a century. We have lost our good friend and leader, Jack Sargeant. However, the Faculty is in good hands. Our excellent staff, led by Elza Davis and Joe Harrison, is doing a yeoman's job. I have appointed a Search Committee and will request from them the name of an Executive Director by mid-September 1986.

External pressures are attempting to divide and conquer the Medical and Chirurgical Faculty of the State of Maryland. The Faculty as well as organized medicine must develop a unity that has no parallel in the history of medicine. We must begin that unity at the component society level and spread it all the way to the American Medical Association. We must represent all physicians while developing methods to bring in nonmember physicians.

Communications within Med-Chi (and all organized medicine) must improve. I will begin a monthly letter to presidents of component societies and specialty groups. I will request members of the Med-Chi Executive Committee to visit all areas of the state. I will encourage component society officers to attend Med-Chi functions and meetings as often as possible.

I have several immediate recommendations to the Council that will improve Med-Chi's functions, membership, and public opinion. The first is the development of a Governmental Relations Division. This area needs to be greatly strengthened, and I plan to request one, possibly two, additional lobbyists for the Faculty. Further, there should be full-time staffing for this Division, with the ultimate goal of the development of a full-time Annapolis office. Physicians must become involved in Annapolis. Legislators are anxious to hear directly from us. We are evaluating the possibility of developing a rotational schedule so that a physician is available in Annapolis each day the General Assembly is in session.

I will recommend the development of a Research Division within Med-Chi. The AMA provides us data on a national basis. We must be able to provide them with the best available Maryland data. We cannot rely on others to tell us how physicians are practicing.

I will request specialty society representation on Council. This will improve the communication with the specialties, and that communication and participation will increase the membership of Med-Chi.

How will we pay for all this? We have not had a dues increase in Med-Chi for seven years. I will begin work immediately on methods to increase nondues income. Many other physicians' groups and specialty societies lobby in Annapolis. Since we all are working together, the hiring of additional lobbyists by specialty groups when Med-Chi has one of the finest lobbying programs in Annapolis is a waste of their time and money. They might better put their monies into Med-Chi: we can do more for them for less money. In addition, we have many special services that could be made available to components as well a specialty groups to increase their efficiency and also increase our income: computers for physicians (both hardware and software), our Library, and our Insurance Agency.

Health Care Revolution

Two issues of the Health Care Revolution greatly affect physicians in Maryland: change and competition.

Change is going to be necessary and change it will be, as never before faced in medicine. Change is particularly hard to accept when it is being forced upon us. However, change we must, but that change must be influenced and, where possible controlled, so that the practice of medicine, the delivery of quality health care, and the individualization of health care are not sacrificed. We cannot resist change by putting our heads in the sand: when you put your head in the sand, another major part of your anatomy is very much in evidence.

Competition is more of a problem in Maryland than many of you realize. It is one of the major problems facing the health care industry in Maryland today. This is an area in which we have little experience, but we must learn in a hurry. Physicians and this medical society are on a collision course with the hospital industry. That collision must be avoided. Physicians are being forced by third-party carriers and the public into a competitive market. Maryland's intense regulation of hospitals shields them from competition; however, physicians are not protected and must compete in the open market. This dichotomy threatens health care in Maryland by pitting physicians against hospitals.

We must remember that physicians are the only persons who can practice medicine. We must not let big corporations erode the practice of medicine by allowing the economics of health care to destroy the intimacy of the physician-patient relationship. We must continue to be our patients' advocate and to protect quality health care. We must begin immediately with each individual patient we see. Don't despair. We are a proud profession; we will remain so.

I want to close with a few words of wisdom. My wisdom, as the country doctor from the Eastern Shore, comes from bumper stickers. Late one night, I left Annapolis after a particularly trying day. The legislators had badgered and questioned us closely, and it was obvious to me the legislators really do represent the public and public opinion. As I was driving down the ramp of the parking garage, a car cut in front of me. Its bumper sticker commanded "Lead—Follow—Or get out of the way." That is what the public is saying. Organized medicine must lead. And we will—to assure that quality health care is available at an affordable cost.

DONALD T. LEWERS **MD**
President



Incoming president **Donald T. Lewers** MD (right) receiving the presidential gavel from his predecessor, **J. D. Drinkard** MD.

Annual Reports of Committees

Ad Hoc Building

Mr. President and Members of the House of Delegates:

Anticipated early 1986 completion of the renovation of the School #49 building was delayed by a series of unanticipated construction difficulties. Efforts to sink pilings to reinforce the building were hampered by weather and by the presence of an underground stream. Earliest drawings failed to show water and sewer pipes beneath the parking lot; they were severed, leaving the Coggins Building without water.

The reunion for the former students of the school is planned for September 14, 1986 with a reception at the Meyerhoff Symphony Hall and tours of the building. About 2,500 former students have been contacted.

A donation of $34,511 was received from the estate of Russell Fisher MD, who served as this Committee's first chairman from 1971 until 1984. Dr. Fisher died in early 1985, naming the building fund in his will.

Donations for the building fund were received also from the Prince George's County Auxiliary and the state Auxiliary. Additionally, funds originally designated for the John Sargeant Scholarship Fund were officially transferred to a Sargeant memorial Building Fund at the request of the family and with the approval of Council. A shortfall in total funding prompted passage of a resolution by the House of Delegates in April for a $100 assessment per member to pay final costs.

At its next meeting, the committee will make plans for the dedication and for naming rooms for those who donated substantial funds for the building.

My personal thanks to all who contributed so generously and to the members of the committee for their assistance. A very special thank you to the Auxiliary for responding to my request for assistance.

GEORGE S. MALOUF MD, Chairman, Hyattsville
CHARLES R. CHANEY MD, Hagerstown
BERNARD S. KLEIMAN MD, Baltimore
REYNALDO L. LEE-LLACER MD, Clinton
P. GREGG RHODES MD, Easton
MRS. MILDRED TAYLOR, Auxiliary President, Columbia

Ad Hoc Corporate Control of Medicine

Mr. President and Members of the House of Delegates:

The Ad Hoc Committee on the Corporate Control of Medicine was formed last summer to study the impact of corporate inroads into the practice of medicine. The Committee is charged with protecting the public health and determining the manner in which the Faculty can address these important issues.

This past year saw the Committee investigating the patient "dumping" issue in Maryland and meeting with representatives of Blue Cross/Blue Shield to learn as much as possible about the proposed Medicare Demonstration Project. Currently, the Committee is meeting with representatives of the Department of Health and Mental Hygiene to discuss quality of care issues involved with outpatient surgical centers.

The Committee will continue its work in the coming year and plans to meet with representatives of various corporate medical facilities and groups to investigate issues of quality medical care.

THOMAS A. COLLIER MD Chairman
RICHARD A. BERG MD
JOSEPH I. BERMAN MD
BARNEY M. DAVIS, Jr., MD
BAYANA B. ELMA MD
BENJAMIN MALDONADO MD
JOSE MARTINEZ MD
MARY LOUIS MORDEN MD
KARL H. WEAVER MD
JOSEPH W. ZEBLEY III, MD
BERNADETTE LANE, Executive Director
Baltimore City Medical Society
DOROTHY HOLMAN, Executive Director
Baltimore County Medical Association
HAROLD F. FRYE, Executive Director
Montgomery County Medical Society
ANGELO TROISI, Executive Director
Prince George's County Medical Society

Ad Hoc Policy Advisory on AIDS

Mr. President and Members of the House of Delegates:

The Ad Hoc Policy Advisory Committee on AIDS was formed to study the issues concerning the growing epidemic of AIDS and to educate members of the society with regard to treatment of AIDS. Membership of this Committee consists of physician members of Med-Chi as well as representatives from local and state health departments, the Health Education Resource Organization, and the Center for Health Education.

The Committee's major focus in its first five meetings was on education. With the assistance of several health departments, a flow chart was developed that was distributed at the Annual Meeting. It will be expanded further into a suggested treatment plan to be distributed to physicians in Maryland, showing steps to take when a patient is considered at high risk or when a patient requests the HTLV-III test. Backup information will be included to help physicians manage AIDS patients.

The chairman also met with members of the Maryland Bar Association to develop a joint Medicolegal Committee on AIDS that will study the legal issues of

this disease. Only two meetings of the joint committee were held.

AIDS is a rapidly growing epidemic, and there is a barrage of information available. The Ad Hoc Advisory Committee will continue to review all information and will develop an appropriate educational program for physicians and for the public.

JOHN B. DEHOFF MD, Chairman
ROBERT ANCONA MD
DONALD J. FISHMAN MD
SUSAN R. GUARNIERI MD
HELEN G. McALLISTER MD
STANLEY M. ROSEN MD
PETER LAQUEUR
EBENEZER ISRAEL MD
DIANE MATUSAK MD
DIANE DWYER MD

Alcoholism and Chemical Dependency

Mr. President and Members of the House of Delegates:

At the close of the 1986 Annual Meeting, the Committee on Alcoholism and Chemical Dependency completed its eighth year as a full standing committee of the Faculty. The Committee has held regular monthly meetings throughout the year with one major goal: to educate the medical profession and the public with respect to alcoholism and chemical dependency as illnesses.

The Committee continues to maintain a broad membership by drawing on the expertise of physicians as well as representatives from the Department of Health and Mental Hygiene, the Baltimore City Health Department, the American Council on Alcoholism, clergy, and major industrial companies throughout Maryland.

The Committee's first accomplishment this past year was to expand its scope to include other chemicals. After recommendation to the Bylaws Committee and to the House of Delegates that the Committee's scope be expanded, both bodies approved the change, renaming it the Committee on Alcoholism and Chemical Dependency.

In an effort to expand the educational effort of this Committee, contact has been made with other health professionals to determine whether their associations deal with the issues of alcohol and chemical dependency in an educational sense. The three associations contacted (Maryland Nurses Association, the Maryland Psychological Association, and the Maryland State Dental Association) were asked to appoint a liaison member to this Committee in hopes that the knowledge will be taken to the parent organization through that individual.

The Committee's agenda also included the review of legislation proposed during the 1986 Legislative Session. While the results of this year's legislation coincided with the recommendations of this Committee, it was the consensus of committee members that stricter laws for DWIs must be imposed and enforced particularly for those who refuse treatment. Letters will be directed to Maryland judges in an attempt to educate them toward encouraging treatment and rendering more stringent penalties on DWI offenders, and to assure that penalties will be imposed before a press is made for stricter laws.

The Committee also participated in the 1986 Annual Meeting by sponsoring a scientific session. The two-part session was divided into Current Concepts in the Treatment of Alcoholism and Fetal Alcohol Syndrome. The speakers were William E. Flynn MD, Washington, DC; and Sheldon I. Miller MD, Co-Chairman of this Committee.

Many other topics and areas of concern were discussed throughout the year. This Committee continues toward its goal of educating residents of Maryland about the deadly disease of alcohol and chemical addictions, and its members are eager to continue its course.

The Co-Chairmen are appreciative of the time devoted by the members of this committee to this important aspect of Faculty activity. The Co-Chairmen would also like to thank the immediate past Co-Chairmen for their expertise and assistance during this past year.

SHELDON I. MILLER MD, Co-Chairman
BRUCE T. TAYLOR MD, Co-Chairman
CONRAD B. ACTON MD
FEDERICO G. ARTHES MD
BARRY M. COHEN MD
DANILO R. CORONEL MD
WILLIAM T. DIXON MD
SUDHIR K. DUTTA MD
CLAUDE R. FEINSTEIN MD
W. RICHARD FERGUSON MD
LUIS F. GONZALEZ, Jr., MD
PAUL F. GUERIN MD
JOHN H. HIRSCHFELD MD
THOMAS W. JONES MD
LORI D. KARAN MD
ROBERT R. KENT MD
HARRY F. KLINEFELTER MD
S. EUGENE LONG MD
SIDNEY J. MALAWER MD
GEORGE G. MERRILL, JR., MD
MARK H. PILLOR MD
MICHAEL D. POTASH MD
ABRAHAM M. SCHNEIDMUHL MD
MAXWELL WEISMAN MD
CHARLES WHITFIELD MD

Advisory Members
RONALD N. FLAMER
LUDWIG L. LANKFORD
PHIL McKENNA
ROBERT MILLER
REVEREND MICHAEL G. ROKOS
SEANA SHAW MD
ISADORE KAPLAN MD
EMMA J. STOKES PhD

American Medical Association Education and Research Foundation

Mr. President and Members of the House of Delegates:

Faculty Contributions
June 1, 1985–May 31, 1986

Allegany	$ 375
Anne Arundel	1,400
Baltimore City	3,540
Baltimore County	2,720
Calvert	30
Caroline	—
Carroll	225
Cecil	230
Charles	135
Dorchester	90
Frederick	315
Garrett	75
Harford	690
Howard	570
Kent	75
Montgomery	4,970
Prince George's	2,115
Queen Anne's	30
Somerset	—
St. Mary's	45
Talbot	465
Washington	510
Wicomico	825
Worcester	50
Total	$19,480

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Physicians' Contributions to National, June 1985–May 1986	$9,481.00

AMA-ERF Checks Presented Wednesday, April 16, 1986

University of Maryland School of Medicine	$30,241
Medical Student Assistance Fund	5,393
Johns Hopkins University School of Medicine	22,935
Medical Student Assistance Fund	3,350
Uniformed Services School of Medicine	1,990

ELIZABETH A. LINHARDT
State Chairman AMA-ERF

Auxiliary

Mr. President and Members of the House of Delegates:

This year the national theme of the American Medical Association Auxiliary and our Auxiliary theme has been "Don't Retire From Life. . . Share the Experience of a Lifetime." Auxilians from every county enjoyed a special presentation by our Lifetime Experience Chairman, Bobbie Niklewski, and her cast of favorite players emphasizing our theme during the Summer Board Meeting. All auxilians statewide set their goals high for auxiliary during this meeting.

At the Semi-Annual Meeting in Bermuda Donald Drinkard MD, President of Med-Chi, addressed our meeting concerning the medical family and medical issues. During the Fall House of Delegates meeting the topics "The Myths of Aging," "The Elderly," "Stop to Smell the Roses," and the film, "The Sixth Sense" were all excellent.

Many physicians and spouses attended "The Medical Family: To Your Good Health," cosponsored by Med-Chi's Committee on Physician Rehabilitation and the Auxiliary. During the Annual Meeting, auxilians attended the session, "Physicians and Their Families: The Role of Alcoholism and Substance Abuse."

We have supported the efforts of Med-Chi by frequently going to Annapolis, writing letters to legislators, and participating in mailing requested materials. The Auxiliary's legislative days were excellent and we are grateful to Mary Skipton for her guidance. The Auxiliary also worked with the Healthy Majority.

William H. M. Finney MD, President of Marylanders for Malpractice Liability Reform, Inc., informed Auxiliary during our Winter Board Meeting of the importance of being concerned about professional liability. Many auxilians from component societies reported their accomplishments and projects at this meeting.

Professional liability was the topic of a two-day Multi-State meeting of auxilians from Pennsylvania, Virginia, West Virginia, DC, Connecticut, and Maryland. Dr. Jack Carey of MMLR was a keynote speaker, and the MMLR slide presentation was outstanding.

Throughout the state, three Health Career Days were held. One in Talbot County, another in Montgomery County, and the state Health Careers Day at Essex Community College and Franklin Square Hospital. Many scholarships were awarded this year: the amount exceeded $10,000.

Statewide auxilians worked with our MMPAC chairman, Kassie Herbert, in completing voter registration.

The Medical Student/Resident Physician Spouses attended a most informative evening as Velma Seif, an AMA Auxiliary representative, addressed the group.

In March, auxilians representing Baltimore County, Baltimore City, Allegany, Charles, and Prince George's Counties received the Doctor's Day proclamation from Governor Hughes. Auxilians held dinner parties, donated books and infant car seats, and cards were placed on patients' trays in memory of the physicians. State-

wide, all hospital Executive Directors received a letter and Certificate of Appreciation to recognize the physicians on March 30.

AMA-ERF presented checks to the Dean of the University of Maryland School of Medicine for $30,241 and a restricted amount of $5,393. The Johns Hopkins School of Medicine received $22,935 and restricted funds of $3,350. Uniformed Services University of the Health Sciences received $1,090. AMA-ERF money was raised through many activities including the sale of Maryland tote bags, the Lady Equitable Race, Silent Auction, and the Spring Razzle. This is the breakdown of county contributions to the latter two events, held during the 1986 Annual Meeting:

"Spring Razzle"

Allegany	$ 94
Anne Arundel	30
Baltimore City	158
Baltimore	20
Charles	95
Frederick	50
Harford	160
Howard	80
Montgomery	70
Prince Georges	100
Talbot	25
Washington	25
Wicomico	43
Members-at-large	30
State	206
Total	$1,186

Winners:	"Bushel O' Wine"	Joey Dureza (Baltimore City)
	Afghan	Georgine Welty (Talbot County)
	Lenox Ware	N. Castillo (Baltimore City)
	$100	M. Raines (State)

"Silent Auction"

Allegany	$ 80
Anne Arundel	35
Baltimore City	157
Baltimore	30
Charles	105
Frederick	61
Harford	70
Howard	195
Montgomery	45
Prince George's	—
Talbot	47
Washington	—
Wicomico	90
State	240
Total	$1,155

Thanks to all auxilians, physicians, and especially our dedicated chairman, Elizabeth Linhardt, for help in achieving these goals.

The editors of *Hygeia Filiae* and the *Journal* page have encouraged everyone's participation with their excellent articles.

I enjoyed attending the AMA Auxiliary's Chicago informative meetings as well as the meetings of the Virginia, Pennsylvania, New Jersey, and Delaware medical societies. Attending the meetings and activities of our component auxiliaries was a highlight of this year.

We are happy and proud that Mary Strauss from Washington County has been elected Secretary of the AMA Auxiliary.

Ginny Levickas received an award for the history of the Muse family, (a Research and Romance of Medicine project) at the Southern Medical Association's meeting. This was considered the best statewide exhibit.

On behalf of the Auxiliary, Mildred Taylor presented a $5,000 check for Med-Chi's Building Fund at the April House of Delegates meeting.

The most exciting news was the formation and organization of the Auxiliary to the Frederick County Medical Society; we now have thirteen component auxiliaries.

County auxilians met throughout the year at family picnics, coffees, dinner dances, fashion fund-raisers, ethnic dinners, hockey games, yard sales, and art auctions. They learned about health projects, travel tips, decorating ideas, flower arranging, adolescent alcohol and drug abuse, strengthening their relationship with the medical society, stress, gourmet foods, Alzheimer's Disease, and mid-life crisis. Some counties donated scholarships, safety seats, food, clothing, toys, money for a young boy's liver transplant, movies to schools; manned booths during county fairs and parades; helped senior citizens; conducted vision and hearing testing for preschoolers; delivered flowers; distributed bumper stickers; built a "Castastrophe House," and raised funds for the retarded. During the year, I presented reports to Council apprising them of the auxiliary's accomplishments and on-going projects.

I sincerely thank everyone for your fine dedication, your help to so many, and your volunteer hours to make this a successful year when all have exceptionally served the auxiliary. Let's continue to "Share The Experience of a Lifetime."

***KATHLEEN S. KARPERS*, President**

Continuing Medical Education Review

Mr. President and Members of the House of Delegates:

The Committee held five meetings during this past year. Action was taken on the following organizations accredited by Med-Chi to provide intrastate Category I continuing medical education offerings:

1. American Cancer Society—Maryland Division
2. American Heart Association—Maryland Affiliate
3. American Lung Association of Maryland
4. Anne Arundel General Hospital
5. Baltimore County General Hospital
6. Bon Secours Hospital
† 7. Calvert Memorial Hospital
8. Carroll County General Hospital
9. Center for Health Education, Inc.
10. Chestnut Lodge
11. Children's Hospital, Inc.
12. Church Hospital
13. Community Psychiatric Clinic, Inc., Wheaton, MD
†14. Crownsville Hospital Center
15. Doctors' Hospital of Prince George's County
16. Dorchester General Hospital
17. Fallston General Hospital
18. Franklin Square Hospital
19. Frederick Memorial Hospital
20. Good Samaritan Hospital
21. Greater Baltimore Medical Center
†22. Greater Laurel Beltsville Hospital
23. Harford Memorial Hospital
24. Holy Cross Hospital
25. Howard County General Hospital, Inc.
26. Kernan Hospital
27. Levindale Hebrew Geriatric Center & Hospital, Inc.
28. Lutheran Hospital
†29. Maryland General Hospital
30. Maryland Hospital Education Institute
31. Maryland Psychiatric Society
32. Maryland Radiological Society
33. Memorial Hospital, Cumberland
34. Memorial Hospital, Easton
†35. Mercy Hospital
36. Montgomery County Medical Society
37. Montgomery General Hospital
38. Montgomery Village Seminars
†39. The Neurology Center, P.A.
40. North Arundel Hospital
41. North Charles General Hospital
42. Peninsula General Hospital
†43. Prince George's County Medical Society
44. Prince George's General Hospital
†45. Provident Hospital
46. Sacred Heart Hospital
47. St. Agnes Hospital
48. St. Joseph Hospital
49. Shady Grove Adventist Hospital
50. Sheppard & Enoch Pratt Hospital
51. Sinai Hospital
52. South Baltimore General Hospital
53. Southern Maryland Hospital, Inc.
54. Spring Grove Hospital
55. Springfield Hospital Center
56. Suburban Hospital
57. Taylor Manor Hospital
58. Union Memorial Hospital
59. University Health Center, University of Maryland
60. Veterans Administration Hospital
61. Washington Adventist Hospital
62. Washington County Hospital

Note: †—indicates accredition was renewed during 1985–1986
Those hospitals/organizations having no marking were granted accreditation in previous years.

The Committee held its Fourth Annual Meeting of Directors of Continuing Medical Education during Med-Chi's 188th Annual Meeting. A workshop held earlier in the year in cooperation with Suburban Hospital for hospital CME Directors was well received. A similar workshop is planned in another Maryland location this fall.

I would like to thank the members of the Committee for their active involvement in the committee's activities.

The Committee expresses its deep regret for the passing of Saad Kassem MD. The time and devotion put forth by Dr. Kassem is greatly appreciated.

JONATHAN M. SUTTON MD, Chairman
IAN ANDERSON MD
JONATHAN D. BOOK MD
IRVIN H. COHEN MD
WORTH B. DANIELS MD
JOHN M. DENNIS MD
SALVATORE DONOHUE MD
KEVIN N. HENNESSEY MD
CHARLES F. HOBELMANN, JR., MD
JOHN C. HYLE MD
CAROL J. JOHNS MD
SAAD A. KASSEM MD
HENRY H. KWAH MD
JEAN T. LEE MD
EUGENE P. LIBRE MD
GEORGE L. MORNINGSTAR MD
ABDUL NAYEEM MD
MARCOS J. PUPKIN MD
IBRAHIM A. RAZZAK MD
ALBERTO C. SEIGUER MD
R. KENNEDY SKIPTON MD
EDWIN H. STEWART, JR., MD
BERNARD TABATZNIK MD
ERWIN WITKIN MD
JOHN W. BULLARD, PhD, Advisory
JACK L. MASON, PhD, Advisory

Council

Mr. President and Members of the House of Delegates:

Regular Council meetings were held during the year with Executive Committee sessions held every month. All major issues have been reported to the House of Delegates.

Upon the decisive action of Council, patients' interests were protected in state psychiatric facilities when the Faculty challenged the *Coe* Consent Decree. As a final outcome of Faculty support for clinical staffs of the state institutions, a nonadversarial treatment environment has been maintained. Attorneys representing patients, physicians, and administrators have developed a working system whereby patients can continue to receive the legal services needed without jeopardizing the sensitive treatment relationships.

Several recommendations from the Committee on Professional Ethics were approved: restatement of the policy on Second Opinion, conflict of interest statements for Faculty officers, Termination of Medical Care Guidelines, policy for issuance of legal and ethical opinions, and Termination of Physician/Patient Relationship.

Anticipating major activity in the legislature, approval was given for a voluntary solicitation of $100 per physician to fund a public information campaign to complement the legislative effort for malpractice reform. Council also approved a working relationship with MMLR (Marylanders for Malpractice Liability Reform) involving the exchange of members to participate in the two groups leading to a close cooperation on professional liability activity throughout the session.

Councilors considered the Blue Cross/Blue Shield Medicare Demonstration project; heard from the corporations's President, Carl Sardegna; and took a public posture to raise concerns over the monopolistic nature of the proposal and the lack of public accountability and oversight.

A shortfall in funding for the new building renovation produced a request for a one-time assessment to be presented to the House of Delegates at the next meeting.

It has been an honor to serve the Faculty as Council Chairman over the past year. I want to express my appreciation to all the elected leaders of the Faculty who assisted me in this work as well as to all members who were generous with their advice and support.

LEON E. KASSEL **MD**
Council Chairman

Curator

Mr. President and Members of the House of Delegates:

In the past year, the Medical and Chirurgical Faculty was given a large number of historical artifacts including a doctor's kit with instruments, medical laboratory equipment, an apothecary's kit, manuscript prescription books, manuscript ledgers, a photograph of women students examining a cadaver at the Woman's Medical College of Baltimore, a "Lady Sessions" clock (a birth control device for women), and archival documents from the Board of Medical Examiners of Maryland.

A major accomplishment of the past year was the rehousing of the photograph collection in acid-free boxes. Selected documents and prints were deframed and rehoused in acid-free map cases.

Many of the Faculty's paintings, prints and medically related objects were photographed for use in exhibits and to illustrate a number of articles in the *Maryland Medical Journal.* These photographic reproductions, slides and negatives will be retained to document the collection for insurance, archival, and patron-request purposes.

A contract was negotiated with the Conservation Maintenance Office of the Milton Eisenhower Library at Johns Hopkins University for use of their sonic encapsulation machine to help preserve some of the Faculty's fragile archival documents. Restoration of the water color portrait mentioned in last year's report was completed.

Since March 1986, a considerable number of portraits and archival materials have been temporarily stored to accommodate renovations at the Faculty building.

E. DAVID WEINBERG **MD**

Delegates to the AMA House of Delegates

Mr. President and Members of the House of Delegates:

Your delegation to the AMA House of Delegates attended the Interim Meeting in Washington, DC, December 8–11, 1985 and reports the following summary of actions taken at this session.

Tobacco

The AMA House continued to strengthen the Association's position against cigarette smoking and the use of other tobacco products, for example, snuff and chewing tobacco. Firm in their resolve, the delegates overwhelmingly supported new policies aimed at reducing death and disease caused by tobacco. These new measures include:

- A ban on all magazine, newspaper, and billboard advertising of tobacco products through federal legislation.
- Increased participation by physicians in educating the public about the health hazards of tobacco.
- Improved publicity about the adverse health effects of snuff and chewing tobacco.
- Encouragement of government authorities to label all smokeless tobacco as a major health hazard.

1986 Budget and Plan

The House approved a 1986 fiscal year budget and plan based upon predicted operating revenues of $139.5 million and operating expenses of $135.9 million. The

new 1986 AMA plan calls for seven areas of emphasis and major initiatives:

1. Preserving the highest standards of quality of care for the American public.
2. Helping physicians respond to a changing practice environment.
3. Strengthening relationships within the medical community.
4. Revitalizing the AMA's membership growth.
5. Enhancing the AMA's health policy development process.
6. Expanding the collection, analysis, and dissemination of information related to medical practice concerns.
7. Securing the AMA's future.

Medicare Fee Freeze

The continuing freeze on reimbursement for physician services under Medicare caused much discussion. The delegates took a number of actions in an attempt to gain some measure of relief including:

- a resolution urging county, state, and specialty medical societies to help the AMA in continuing an aggressive activity, both legislative and judicial as appropriate, to eliminate the discriminatory action of Congress in imposing an unfair *control of charges* for physician services under Medicare.
- a policy directing the AMA to intensify efforts to increase public awareness of the deleterious effects of the Medicare fee freeze on continued accessibility to physicians to the patient's choice.
- a resolution asking the AMA to continue to oppose and seek repeal of the unnecessary attestation statement on hospital medical records of all Medicare beneficiaries.

Professional Liability

The House considered two informational reports on the crisis in professional liability.

- The AMA Committee on Professional Liability submitted a report that presented some chilling facts on the costs of professional liability.

  Of the $75.4 billion spent on physician services in 1984, 14.5 to 17.5 percent represent costs generated by the current professional liability system.

  The committee also reported that indirect costs of defensive medicine is estimated to be $17.5 billion and the loss of physician income for time on depositions and trial is estimated to be another $40 million.

The Special Task Force on Liability Problems also submitted a report on its major activities in four areas:

- education and community action
- legislation
- defense coordination, including the use of a toll-free hot line
- risk control/quality assurance activities

The House directed that search for solutions to the liability crisis continue as the highest priority of the Association.

Public Awareness Program

The House considered reports on the continuing development of the AMA public awareness program and future plans for improving the physician's image.

The House approved a policy statement that:

- called on the AMA to develop a national strategy to implement the program that will coordinate local efforts in the public awareness area.
- asked that educational materials be developed for the public regarding the impact of changes in the health care system on quality and access to care.
- created an advisory committee of five practicing physicians with some experience or exposure in public education/awareness programs.

State Licensure and Medicare Participation

The House learned that the AMA joined with the Massachusetts Medical Society in a suit opposing a new state law tying state licensure to Medicare participation. The Board of Trustees was praised for taking this timely action, and the House overwhelmingly expressed opposition to this law.

The house adopted a policy statement calling on the Association to:

- maintain its vigorous opposition to the Massachusetts legislation
- strongly affirm the policy that medical insurance should be determined by educational qualifications, professional competence, ethics, and other appropriate factors necessary to assure professional character and fitness to practice.
- oppose any law that compels either acceptance of Medicare assignment or acceptance of the Medicare allowed amount as payment in full as a condition of state licensure.

Funding of Graduate Medical Education

The House adopted a comprehensive report submitted by the AMA Council on Medical Education that examined the current modes of funding graduate medical education and the proposed Medicare legislation affecting GME funding.

The report contained nine principles to guide the AMA in responding to legislative proposals and other challenges to the graduate medical education system.

1. Graduate medical education is an essential com-

ponent of the education of all physicians. The health and well being of the American people are directly benefited by the graduate medical education of physicians. Societal contributions to the financing of graduate medical education are appropriate.

2. The education of physicians in graduate medical education and the clinical care of patients are inextricably linked. Teaching hospitals should be fully reimbursed for the reasonable cost of residents' salaries and fringe benefits.
3. All payers of patient care costs should support graduate medical education in the institutions in which care for their beneficiaries is delivered. Support for both direct and indirect costs must include residents assigned to ambulatory care sites that are essential components of educational programs.
4. Funding from multiple sources should be available to support residency training programs.
5. Resident physicians should not be permitted to bill directly for patient care services.
6. In a period of fiscal constraint, first priority for Medicare funds for residents' salaries and fringe benefits should be accorded to graduates of medical schools accredited by the Liaison Committee on Medical Education or the American Osteopathic Association. Cessation of support for foreign medical graduates should be phased in over an appropriate period.
7. Medical legislation should not be the vehicle for the establishment and implementation of national physician manpower policies. If required, physician manpower policies should derive from a careful, deliberative process in which educators, the medical profession, and the public participate.
8. Residents should be compensated reasonably in all programs throughout the nation. Uncompensated and undercompensated positions should be discouraged.
9. Reimbursement for patient care by all payers must be adequate to sustain the nation's teaching hospitals. Adequate indirect cost payments under Medicare should be continued. Government must consider and fund separately the care of the nation's indigent.

Therapeutic Substitution of Drugs

The House adopted a report describing AMA activities in monitoring state legislation that would authorize pharmaceutical or therapeutic substitution of a physician's prescription. The report also provided examples of therapeutic substitution that may result in harm to patients.

The House affirmed AMA policy to vigorously oppose any concept of prescription drug substitution without the prescribing physician's authorization.

AMA Action Plan for AIDS and Related Conditions

The House adopted a report describing an AMA action plan to disseminate information about AIDS to physicians and to establish physicians as the most credible accessible source of AIDS information. The report noted that:

- As of October 1985 over 14,000 cases of AIDS had been reported in the U.S.
- Over one million persons are estimated to be infected with the AIDS retro-virus.
- AIDS has the potential of becoming the major lethal pandemic of the century.

Boxing

The House of Delegates reaffirmed AMA's opposition to boxing established at the 1984 Interim Meeting.

This earlier policy states that the AMA:

1. Encourage the elimination of both amateur and professional boxing, a sport in which the primary objective is to inflict injury;
2. Communicate its opposition to boxing to appropriate regulating bodies;
3. Assist state medical societies to work with their state legislatures to enact laws to eliminate boxing in their jurisdictions; and
4. Educate the American public, especially children and young adults, about the dangerous effects of boxing on the health of participants.

Conclusion

AMA House meetings provide a unique educational opportunity and I would encourage you to attend and participate. Any member of the Association may present testimony at the Reference Committee hearings and, of course, corridor discussions on the issues provide additional opportunities to get your views across.

If you can't come to the meeting, you can be represented through your delegate. Let your delegation know your opinions. You can also prepare a resolution and request that it be submitted to the House.

Many AMA policies began with an individual physician who had a good idea and coaxed it through the democratic process.

Delegates:
ALBERT M. ANTLITZ MD, Chairman
CHARLES F. O'DONNELL MD
MANNING W. ALDEN MD
ROLAND T. SMOOT MD
DONALD T. LEWERS MD
GEORGE S. MALOUF MD
Alternates:
JOHN H. HEBB MD
HENRY N. WAGNER, Jr., MD
MICHAEL R. DOBRIDGE MD
J. ROY GUYTHER MD
MARK B. JOHNSON MD (Resident)
NICHOLAS P. GEORGES (Student)

Drugs

Mr. President and Members of the House of Delegates:

The Committee met eight times in the past year and interviewed ten physicians. In addition, multiple pharmacy surveys have been received, and record reviews conducted on many other physicians as a result. As in past years, most problems with prescribing can be clarified and settled through an exchange of correspondence among the Committee chairman and the physicians involved. On the other hand, several difficult and serious cases before the Committee have brought about an increased awareness of the importance of the Committee in acting as advisor and consultant to physicians and also as a watchdog of undesirable prescribing practices of Maryland physicians.

One of the most serious and most often reported problems brought to the Committee is the prescribing of pain medication (analgesics or narcotics). Some physicians seem to believe that "more is better" and continue to prescribe pain medication over extended periods often with no documented improvement in the patient's complaint. We believe physicians should take note of available literature to update their knowledge of the effects and side effects of analgesics and narcotics as well as their interaction with other drugs. Committee members will offer articles for publication in the *Maryland Medical Journal* in the coming year in an effort to contribute to such education.

The final report of the PADS program (Prescription Abuse Data Synthesis) was presented to Governor Hughes by Harrison Rogers MD, president of the American Medical Association, in a ceremony at the State House in February. This report indicated by charts and by statistical information that Maryland was once again at the head of the class. The prescription drug diversion problem in Maryland is much less troublesome than in most other states, and the cooperative and open liaison between agencies and professional associations has been given the credit. Recommendations in the report call for increased education in the state's medical schools in prescribing and dispensing practices, a stronger role of the professional associations in educating members on use and misuse of controlled drugs, development of programs for all impaired professionals, and a request that the Governor convene a meeting of representatives of all involved licensing, disciplinary, and enforcement agencies and health professional associations to plan and implement procedures for the continuing cooperation between the groups.

The Committee will become even more active in the coming year as attention of the public and the media is given to those few physicians who misuse their prescribing privileges. The Committee will continue to strive to maintain its balance of educational and disciplinary value to the profession and to the community.

The chairman expresses his appreciation to the members of the Committee who have been so faithful in devoting their time to assisting in this task. Med-Chi staff, too, is thanked for its efficient assistance.

STEPHEN A. HIRSCH MD, Chairman
AUGUSTO R. DeLEON MD
NELSON G. GOODMAN MD
ROBERT R. KENT MD
J. LEONARD LICHTENFELD MD
DON M. LONG MD
DONALD PACHUTA MD
JOHN A. SINGER MD
JOHN R. SMITH MD
RICHARD F. TYSON MD

Emergency Medical Services

Mr. President and Members of the House of Delegates:

The Committee met four times during the 1985–1986 year and discussed a variety of matters related to emergency medicine.

Committee members were surveyed by the chairman with regard to disaster readiness of hospitals in Maryland. A preliminary review of the survey results indicates that most hospitals have a unique emergency possibility in their area and have set up and carried out disaster plans. MIEMSS has a statewide emergency plan, and there is coordination between Maryland hospitals in the event of a disaster.

The Committee surveyed Maryland hospitals regarding procedures for dead on arrival (DOA) patients. Of those responses received, over half indicated they have standard operating procedures for DOAs and a chaplaincy service as well.

There was also discussion on a proposed protocol for emergency transport of hospice patients. MIEMSS is assisting in the revision of the proposed protocol drafted by a Maryland physician.

The Committee jointly sponsored a session at the 188th Annual Meeting of Med-Chi on "General Management of Poisoned Patients" and "Toxathon," which was modeled after a television quiz show.

JOHN B. DeHOFF MD, Chairman
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FRANK T. BARRANCO MD
WAYNE BARRY MD (Advisory)
C. TIMOTHY BESSENT MD
SWADESH K. BHATIANI MD
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ALEXANDER P. CADOUX MD
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STANLEY Z. FELSENBERG MD
LEONARD H. FLAX MD
JOSEPH A. FORTUNA MD
STEVEN GEVAS MD (Advisory)
MANUEL A. GONGON MD
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DAVID I. HOLLANDER MD
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SURRENDRA K. MILAK MD
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AMEEN I. RAMZY MD
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KEITH T. SIVERTSON MD
NANCY M. SWEET MD
JEAN M. THORNE MD
CHARLES M. WEBER MD
CHARLES E. WILES III, MD
REED WINSTON MD (Advisory)

Emotional Health

Mr. President and Members of the House of Delegates:

During 1985–86, the Committee on Emotional Health became involved with several important issues facing the medical community concerning the quality of health care in Maryland. The Committee decided to address the issues of physician representation within the Department of Health and Mental Hygiene; the negotiation of the *Coe* Consent Decree and Contract; and legislation in the General Assembly that potentially could have an adverse affect on the quality of psychiatric care delivered in Maryland Hospitals.

The Committee followed with interest the process of selecting a new Director of the Mental Hygiene Administration. Stressing the need for physician involvement within the Department, the Committee expressed this concern in individual actions and communications with state officials. The Committee was pleased by the appointment of Henry T. Harbin MD as new Director in November 1985.

With the support of the Faculty, the Committee held meetings and corresponded with representatives of the Department of Health and Mental Hygiene to ensure that senior state psychiatric facility clinicians be included in negotiating the terms of the *Coe* contract. With state psychiatric facility clinicians represented on the *Coe* Board of Review, an acceptable and clinically useful contract was implemented for a six-month period, to be reviewed again by the Board after that time.

As Editor of the *Maryland Medical Journal* column "Today's Psychiatry," Lino Covi MD wrote articles and successfully organized and edited manuscripts contributed by Committee members and other local physicians. The Committee is grateful for his leadership with this successful endeavor.

The Committee's program on AIDS at the 1986 Annual Meeting was a tremendous success. Emile Bendit MD, as liaison for the Committee, helped organize the program in conjunction with the Subcommittee on Immunizations and Infectious Diseases of the Committee on Preventive Medicine and Public Health.

The Committee looks forward to a busy and productive 1986–87. The Chairman thanks each Committee member for her/his time and effort in working to improve the quality of care for Maryland's citizenry.

GARY W. NYMAN MD, MBA, Chairman
IDO ADAMO MD
EMILE BENDIT MD
CHRISTOPHER BEVER MD
MICHAEL J. BISCO MD
ARNOLD BRENNER MD
GLENN BRYNES MD
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ALBERT POWELL MD
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H.L.P. RESNIK MD
BETTY W. ROBINSON MD
BARRY F. RUDNICK MD
STEPHEN W. SIEBERT MD
HARRY W. SMITH MD
EDWARD L. SUAREZ-MURIAS MD
RONALD TAYLOR MD
LEONARD ZULLO MD

Executive Director

Mr. President and Members of the House of Delegates:

The untimely death of John Sargeant CAE, Executive Director of the Faculty, on November 25, 1985 brought to an end 27 consecutive years of leadership he offered to the membership of this organization. His loss is one that touched both members and staff. Your Executive Committee offered me the opportunity to serve as the Acting Executive Director until a permanent selection is made.

I was joined in Annapolis for the legislative session by our President-elect, Donald T. Lewers MD, who proved an excellent and effective lobbyist for the Faculty. His sacrifice of time and energy, and the record of accomplishment he leaves with us must be commended. For the first time in ten years, a major package of professional liability reform legislation passed. The Faculty was joined in its efforts by many outside groups including the Medical Mutual Liability Insurance Society, the Marylanders for Malpractice Liability Reform, Blue Cross/Blue Shield of Maryland, and the Maryland Chamber of Commerce, to name a few. In addition, individual physicians and auxilians throughout the state made a personal commitment to assist in the lobbying effort by participating in Annapolis and by contacting legislators all over the state.

In February, the leadership of the Faculty met to outline its priorities for the coming years. Chief among them was to write a job description for the next executive director. They also identified a number of areas in the management of the Faculty that should receive increased attention: creation of a Department of Government Relations with year-round personnel, development of sources of nondues income to avoid dues increases when possible, increased efficiency for the peer review activities of the Faculty and development of professional liability data and other resource materials. All these activities are well under way.

Major staff reorganization is in process. Constance Townsend, Assistant to the Executive Director for over 22 years, has retired. She was honored by both physicians with whom she has worked and by her co-workers, both past and present. As a result of her departure, the disciplinary committees and the Committee on Physician Rehabilitation will come under the direction of Michael Murray, Assistant Executive Director. Other changes will be reported as they occur.

A search committee has been formed to seek a permanent replacement for Mr. Sargeant. The target date for the selection is to be concurrent with the semiannual meeting in September.

It has been an honor to serve you and the Faculty's membership as the interim director. The challenges have been great, and the rewards even greater. My sincere thanks to the leadership of the Faculty and the individual physicians throughout this state who have offered assistance, advice, and encouragement over these many months.

ELZA S. DAVIS CAE
Acting Executive Director

Finance

Mr. President and Members of the House of Delegates:

The Finance Committee appointed a new fund management company to supervise the Faculty investment portfolios of the endowment funds and pension plan funds.

The Bowman Financial Management Company, Inc. was selected after several meetings and interviews with prospective consultants. The Committee was favorably impressed with the presentations of Donald E. Bowman and Howard S. Boote, Jr., President and Vice-President of the company. Their investment philosophy and investment techniques seemed to satisfy the requirements of the Faculty. Bowman is much smaller than T. Rowe Price, and the Committee believed this to be an advantage. Bowman can act and react to market conditions much faster.

The market value of the pension plan portfolios at March 31, 1986 was $1,581,104. The Endowment Fund portfolios were valued at $2,438,422. Bowman had the funds under its management for only six months at March 31, 1986, so a realistic comparison of management results against other market indices will be available at a later date.

JOSE M. YOSUICO MD, Chairman
LEWIS H. DENNIS MD
GERALD W. GLOWACKI MD
ALFONSO H. JANOSKI MD
ARTHUR T. KEEFE, Jr., MD

Finney Fund

Mr. President and Members of the House of Delegates:

Members of the Finney Fund Committee were invited to join with members of the Library and History Committee to attend a meeting of the Quinan-Cordell Medical History Club on September 19, 1985.

The surgical periodicals purchased for the Faculty Library with income to the Finney Fund in 1986 remained the same as in 1985.

PETER VAN B. THORPE MD
JUAN G. GAN MD
JAMES P. McCARRICK MD
EDMUND G. BEACHAM MD
THEODORE E. WOODWARD MD

Hospital Medical Staffs

Mr. President and Members of the House of Delegates:

The Committee on Hospital Medical Staffs continued to meet in conjunction with the Faculty's Annual and Semiannual meetings. It agreed to work with the Committee on Physician Rehabilitation to encourage each hospital medical staff to establish physician wellness committees. These committees would assist impaired physicians and develop preventive and other "wellness" programs.

The Committee also continued to monitor the actions of the AMA's Hospital Medical Staff Section. In the year to come, the Committee hopes to find ways to become more responsive to the needs of hospital-based physicians.

BENJAMIN DEL CARMEN MD, Chairman
JAMES BELL MD
THOMAS CIMONETTI MD
MARCO CLAYTON MD
PETER FAHRNEY MD
HUBERT FIERY MD
MOISES FRAIMAN MD
JEROME HANTMAN MD
LOUIS HIMES MD
GUNTHER HIRSCH MD
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CARL HENRY KELLER MD
GAYLORD KNOX MD

RALPH LONGWAY MD
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E. MASSOUD POUR MD
PAUL PRITCHETT MD
MONIRA RIFAAT MD
WILLIAM H. ROE MD
JAMES ROSBOROUGH MD
BARRY ROSENBAUM MD
ROBERT SCHLAGER MD
WILLIAM SMULYAN MD
JACK STERN MD

Legislative

Mr. President and Members of the House of Delegates:

Med-Chi's Legislative Committee began working early in October formulating a comprehensive medical malpractice reform package and strategies for its passage. The Committee worked closely with the Marylanders for Malpractice Legislation Reform (MMLR) to ensure a unified effort within the Maryland medical community. The legislative goals became:

- Change in the collateral source rule
- Periodic payments
- Decrease in statute of limitations for minors
- Cap on noneconomic damages
- Total cap on awards of one million dollars
- Certificate of merit
- Abolition of punitive damages
- Plaintiff contigency fee regulation
- Strengthen health claims arbitration mechanism
- Strengthen peer review mechanism
- Alter countersuit provisions—abolish requirement of special damages

Legislative Committee Chairman Israel Weiner MD was a member of the Governor's Task Force on Medical Malpractice, which proposed legislation dealing with tort claims, award of damages, health claims arbitration, malpractice insurance rates, and peer review and risk management.

In all, over 35 separate pieces of legislation designed to affect the medical malpractice situation were introduced through various sources.

On the last days of the session, three significant bills were passed and ultimately signed by the Governor. They were: SB 558, SB 559, and SB 560. Collectively, they provided for a $350,000 cap on noneconomic losses for all personal injury actions; structured settlement provisions; alterations of the health claims arbitration process to include certificate of merit for plaintiff and defense; use of formal rules of evidence; definition of an expert witness as one who spends no more than 20 percent of time testifying; mandatory availability of service for physicians; and, filing limit for damages concurrent with the jurisdiction of the district court. A peer review system of reporting requiring close cooperation between Med-Chi, the Health Claims Arbitration Office, and the Commission on Medical Discipline was enacted as part of the package along with mandatory risk management credentialling and reporting procedures for hospitals.

Considered significant strides in the ten-year tort reform effort, these legislative achievements were made possible by the efforts of Med-Chi physicians, auxiliary and staff members, and MMLR members including Donald T. Lewers MD, Israel Weiner MD, Gary Nyman MD, William H. M. Finney MD, William H. B. Howard MD, Graham Fallon MD, Fred N. Cole, Jr., MD, E. F. Shaw Wilgis MD, Barry Wolk MD, Mrs. Kathy Karpers, and Elza Davis CAE. Legislators who withstood great political pressures to support the viewpoint of the medical profession were Melvin Steinberg, Benjamin Cardin, J. Joseph Curran, Jr., Thomas V. Mike Miller, F. Vernon Boozer, Joseph Owens, and Larry Young. The profession was joined in its efforts by other organizations: Blue Cross/Blue Shield of Maryland, the Medical Mutual Liability Insurance Society, and Maryland Hospital Association, among others.

In addition to the malpractice effort, many other bills were introduced that had an effect on the medical community. Subcommittee chairmen of the Legislative Committee who worked to establish viable Faculty positions in their respective areas were Doctors Harold Bob, Reynaldo Lee-Llacer, Paul Burgan, Hilda Houlihan, Mehdi Yegeneh, Stephen Hirsch, Norman Bohrer, Lewis Kellert, Robert Goldstein, Craig Jeschke, A. Lewis Kolodny, Donald Dembo, Thomas Collier, Lawrence A. Jones, J. Andrew Sumner, Stanley Kirson, and Albert Folgueras.

Several bills were introduced in an attempt to revive the unsuccessful 1985 effort to require wearing of seatbelts in automobiles. Of these, SB 15 and HB 110 were signed into law. They require those traveling in the front and window seats of a passenger or multipurpose vehicle to wear seat restraints. A joint report on the effect of the law on public safety will be presented to the 1988, 1989, and 1990 General Assemblies by the Secretary of Transportation and the Insurance Commissioner.

Once again several bills were filed to restrict or discourage the use of tobacco products. Four bills on this issue passed the legislature in 1986. SB 409, SB 1067, and HB 915 involve tax on the sale of cigarettes while HB 776 prohibits the sale of smokeless tobacco to minors. Although HB 915 was vetoed by the Governor, the remaining three bills represent an improvement over last year when no antismoking bills survived the session despite strong support from various sectors.

Two pieces of legislation, SB 591 and HB 846, attempted to establish hospital admitting privileges for psychologists. Med-Chi's part time lobbyist, Gary Nyman MD, and others fought against and successfully defeated this legislation. The issue has been referred to

summer study.

SB 830, designed to restrict the privilege to dispense drugs, was, after several changes and much compromise, passed and signed. The final version requires, with some exceptions, a licensed dentist, physician, or podiatrist to apply to their respective licensure board for written approval to dispense. Samples and starters are exempt. The applicant must prove to the licensing board that dispensing by the applicant is in the public interest.

Supporters of SB 30 and HB 1320—Breast Cancer Information, claimed last year's brochure (produced and distributed by Med-Chi), which described alternative breast cancer treatments, did not solve the problem. Although almost 54,000 brochures were mailed to physicians, clinics, and private individuals across the state, less than 100 tear-off responses were returned to Med-Chi. Some supporters implied lack of wide distribution of the brochure by physicians was the cause of such a low return and believed legislative rather than voluntary solutions were needed. As a result, both were enacted, and HB 1320 was signed into law. Physicians will be required to present specific information formulated by the Department of Health and Mental Hygiene to breast cancer patients within five days of treatment. The patient must sign a form to verify receipt of this information.

One of three bills filed this year concerning the retention or disposition of personal medical records became law. SB 910 requires physicians not to destroy the medical records of an adult patient within five years after the record is made unless the patient is notified. In the case of a minor patient, records must be retained until the patient reaches 21 years old or five years after the record was made (whichever is later) unless the patient's parents are notified. If the records of a minor indicate advice or treatment for abortion, contraception, venereal disease, and other conditions listed in Sections 20-102(c) and 20-103(c) of the Health General Article, the minor must be notified. In the case of a deceased sole practitioner, the law allows notice to be given to patients by publication in a newspaper.

An active campaign was conducted by the Physicians Assistants Association this year to establish a higher level of professional recognition. This was partially achieved through HB 976, which allows for certification under the Board of Medical Examiners and a specific scope of practice. They will not, however, be able either to practice independently or to bill separately for their services.

Although HB 1813 was not passed, the issue of Verification of Death will be studied this summer by an Ad Hoc committee of emergency medical personnel, funeral directors, hospice network participants, representatives of the medical examiners office, legislators, and others. The group will present suggestions to the 1987 legislature for resolving the issue of who should be authorized to verify death in nonhospital surroundings.

The most controversial Health Costs Containment bill in 1986 was HB 1770 CON Exemption for Private Offices of Physicians, Podiatrists, and Dentists. This bill requires CONs for ambulatory surgical facilities or centers. An ambulatory surgical facility or center is defined in the law as a full-time or partial operation that primarily provides surgical services to patients not requiring hospitalization and seeks reimbursement from third-party payors as an ambulatory surgical facility or center. Physicians who received a determination that a CON was not required before February 12, 1986 and who incurred obligations of $100,000 or more in reliance on the determination are exempt from the legislation. Also exempt are physicians if they provide services only within a single medical or surgical subspecialty as determined by the health resources planning commission in regulation, if the physician's office is used only for the physician's patients or patients of the group, and if the office includes not more than four surgical suites ("subspecialty" includes ophthalmology).

Other bills signed into law of interest to physicians were: HB 1637 Physicians - Disciplinary Action prohibits physicians from accepting a fee for referring a patient to another physician; HB 1366 prohibits physicians, after July 1, 1988, from employing Medical or Radiation Technologists not certified by the Board of Medical Examiners.

The First Aid Room in Annapolis again was sponsored by Med-Chi. Nurse Carolyn McCoy staffed the facility during the entire 90-day session. Mrs. McCoy reported a total of 1,180 patients seen, representing an increase of 43 patients over the 1985 session. A total of 53 physicians served as volunteer "Doctor of the Day," representing a decrease of 5 doctors from the 1985 session. Of these physicians, 31 were from the Maryland Academy of Family Physicians; 6 from the Maryland Chapter, American College of Emergency Physicians; and 16 from other specialties. Physician coverage in January was low: only nine days were covered by a physician. Charles Ligon MD deserves recognition for his efforts in contacting many of the physicians who agreed to serve in the First Aid Room this year. Thanks also go to the Maryland Academy of Family Physicians, Maryland ACEP, and the Anne Arundel General Hospital for their assistance. A certificate of appreciation was presented to Anne Arundel General Hospital at the 1986 Annual Meeting.

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Liaison with the Department of Health and Mental Hygiene

Mr. President and Members of the House of Delegates:

The Committee pursued its efforts to maintain a satisfactory relationship with the Medical Assistance Program for Maryland. In this era of skyrocketing liability insurance premiums, our efforts were successful in negotiating an increased level of reimbursement for obstetrical services.

Other areas of activity included vigorous discussions with the Department regarding equitable laboratory fees and the initiation of a specimen collection fee similar to that of Medicare. Additionally, important issues of quality of care were addressed, particularly with respect to preauthorization requirements for certain surgical procedures.

We are confident there exists an excellent method of addressing such concerns through this Committee, and we indeed appreciate the availability of the Assistant Secretary for Medical Care Programs to interact directly with our group.

As Chairman, I wish to extend my appreciation to each member of the Committee for their valuable time and experience in this area of Faculty work.

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Liaison with Third-Party Carriers

Mr. President and Members of the House of Delegates:

This Committee continued its efforts to ensure reasonable communication with Third Party Carriers, particularly Blue Cross/Blue Shield of Maryland. Much effort was centered on the resolution of claims-specific problems brought to the Faculty's attention by individual physician members for redress within protocol agreed upon by the Faculty and by the insurance carrier. In most cases these individual problems were resolved promptly, and, at the same time, the leadership of Blue Cross/Blue Shield were apprised of certain insufficiencies in the claims processing area. We trust this particular effort will improve the system to benefit all physicians.

Other activity included regular meetings with the newly appointed President of Blue Cross/Blue Shield of Maryland and with Executive staff. The purpose of these sessions was to consider various policy issues including the proposed Medicare Demonstration Project, modifications to the Federal Employee Program, surgical assistant charges, and psychiatric pretreatment authorization. Although I am confident that proper liaison has been established, there is a continuing need for aggressive representation of the private physicians concerns in this increasingly complex and competitive area of the healthy economy.

As Chairman, I am pleased to express my appreciation to each member of the Committee for their dedication to this purpose.

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Advisory Members
JOSEPH D. DRUSANO
ROBERT HEIRD

Library and History

Mr. President and Members of the House of Delegates:

The Library and History Committee met once during the past year in conjunction with the Quinan-Cordell Medical History Club.

Several activities highlighted the past year. The library entered into its second year of in-house computer applications producing bibliographies for Med-Chi's Annual Meeting and other meetings, catalogs and mailing lists for the Chirurgical Bookshop, computerized billing of reference services, transmitting interlibrary loans, and maintaining periodical lists for hospital libraries. The library continues to improve cost recovery for the services provided to users. The Librarian and Associate Librarian spent twelve days consulting with various hospitals regarding library services at their institutions. Contracts were maintained with three hospitals for long-term consulting services during this year. Finally, the operation of The Chirurgical Bookshop continues to generate income that supports the activities of the History of Medicine and the Rare Book Department.

Information and Reference Services

The overall use of the Faculty Library by member physicians increased by 9 percent during the 1985–86 year. Over 1,000 members of the Faculty (1,090 physicians, 22 percent of the Faculty's active membership) called upon the library at least once during the past year.

The following table itemizes the volume of information and reference services for 1985–86, compared with the previous year.

Services	1984–85	1985–86
Computerized literature searches	1,290	992
Photocopied articles	8,040	7,265
Items borrowed from other libraries	1,979	2,351
Items loaned to other libraries	1,414	2,093
Telephone reference questions	9,062	8,410

On-demand reference services have fluctuated over the years. As an example, items photocopied from the collection for members increased by 19 percent from 1983–84 to 1984–85 but fell 10 percent in 1985–86. This year several services declined slightly.

Only computerized literature searching has declined constantly in recent years. The reason, identified in past reports, is that both hospital libraries and physicians are acquiring their own computers and doing their own searching. The Faculty Library has moved forward to assist Med-Chi members in effectively and efficiently searching the literature on the home/office computer. In June and December of this past year, the library sponsored an educational course, "MEDLINE for the Health Professional." The course is being improved and will be offered frequently in the future.

Although the volume of services provided declined this past year, the income from these services increased, allowing the library to decrease the financial support provided by the Faculty. During this past year, because of income from computerized literature searching for both Faculty members and registered nonaffiliated users, the library needed only 41 percent of the money budgeted by the Faculty in 1985–86 for this service. The income from photocopying and interlibrary loans covered 97 percent of the cost of these services.

Nineteen institutions and two individuals maintained subscriptions to the Faculty Library's reference and information services during the past year. Subscription in this program has generated another $1,700 in income.

Library Resources

The following table illustrates the growth of the library collection in the past year.

	1984–85	1985–86
Books added	245	399
Journals bound	616	833
Total volumes added	861	1,232
Volumes withdrawn	340	69
Total volumes in collection	108,909	110,072

The library added 1,163 bound volumes to the collection this past year. The efficiency of our new in-house binding process for periodicals allowed a 35 percent increase in the number of volumes added since issues now are bound as soon as a volume is complete. This also means that fewer issues are lost, and replacement issues are not needed.

Changes in staff within the department over the past year interrupted the weeding project, described last year. It will resume in the next fiscal year.

History of Medicine and Rare Books

In 1985–86, the History of Medicine and Rare Books Department responded to questions from 117 visitors. The staff logged 72 books out of the collection for the use of patrons and responded in writing to 58 questions. The Chirurgical Bookshop, which sells the library's duplicate volumes, issued two catalogs. Income from both sales amounted to $6,844. Donations of books and journals were received from 49 individuals and estates. Had the library attempted to purchase them, the value of these donations would have totaled approximately $21,836.

Several major exhibits were mounted during the year. During the 1985 Annual Meeting of the Faculty, the exhibit's theme was ultraviolet radiation and entitled, "Roast Them, Burn Them, Toast Them: Ultraviolet Radiation Therapy: The Panacea of the 20s and 30s." As part of the September meeting of the Quinan-Cordell Medical History Club meeting, the exhibit "The Winslows: A Family of Physicians" was mounted at the Faculty building. By invitation of the Westminister Church and the University of Maryland, the "Maryland's Black Physicians," exhibit was displayed in May 1985. The Johns Hopkins Medical Plan used the exhibit in February 1986 as part of Black History Month.

Significant progress was made in the aggregation and preliminary organization of the Faculty's archives, that is, Med-Chi's historic institutional records. The archives, when completed and housed in one location, will facilitate access to institutional records by staff and researchers and provide a wealth of material for exhibition purposes. Preservation of these archival materials, as well as the Faculty's collections of photographs, prints, and ephemera was enhanced this year by rehousing a large number of these items in storage containers.

The Quinan-Cordell Medical History Club hosted one speaker for its meeting in September. Sheila Pinsker presented the lecture, "'Cold Breath Means You're Dead . . .' Old Beliefs and New Discoveries: Dr. Randolph Winslow's Personal and Professional Experiences in an Era of Medical Change." Meetings of the club were suspended temporarily due to renovations at the Faculty building.

Staff Activities

The Librarian, Associate Librarian, and Cataloging and Acquisitions Specialist and the Collection Manager of the History of Medicine and Rare Book Collection attended the Annual Meeting of the Medical Library Association in New York City in May 1985. The Librarian currently serves on the jury for awarding the association's Murray Gottlieb History of Medicine prize. He is on the Consulting Editors Panel of the association's *Bulletin of the Medical Library Association.* He is also the elected representative of the Medical Society Librarians' Section to the association's Section Council.

The Associate Librarian, Cataloging and Acquisitions Specialist, and the Reference and Circulation Librarian attended the Annual Meeting of the Medical Library Association's Mid-Atlantic Regional Chapter in Winston-Salem, North Carolina in November 1985. The Reference and Circulation Librarian took part in the poster session at this meeting with an exhibit on using a personal computer to produce customized bibliographies.

The Cataloging and Acquisitions Librarian served as both Vice-President and Program Chairman for the Maryland Association of Health Sciences Librarians during the past year. She will be President of the organization for the coming year.

The Reference and Circulation Librarian attended the Annual Meeting of the Special Libraries Association in Winnipeg, Canada in June 1985. Also, she attended several meetings of the Special Library Association of the Baltimore Chapter and is a member of the Program Committee.

The Collection Manager for the History of Medicine and Rare Book Collection attended the following meetings: Mid-Atlantic Regional Archives Conference Records Management Workshop in Richmond, Virginia; Association for Librarians in the History of the Health Sciences and the American Association for the History of Medicine both in Chapel Hill, North Carolina; the American Institute for Conservation, Washington, DC.; Mid-Atlantic Regional Archives Conference in Harrisburg, Pennsylvania; and the National Archives First Annual Conservation Conference, Washington, DC. She attended a workshop entitled "Photographic Conservation: An Overview", held in Baltimore. She served as President of the Baltimore Area Conservation Group for 1985 and also serves as Co-editor of its newsletter, *The Deckled Edge.* In addition, the collection manager served on the Publications and Steering Committees of the Association of Librarians in the History of the Health Sciences and wrote a regular conservation news

column for its quarterly newsletter, *The Watermark*. While serving on the American Library Association Section's Ad Hoc Committee on Curator/Conservator Relations, the collection manager was charged to draft a statement on *Curatorial Issues Raised by Conservation*.

The entire library staff participated in the Faculty's Annual Meeting in April 1985. Bibliographies of recent articles were prepared and distributed by the library staff at each educational session of the meeting.

Plans for 1986–87

With completion of the new Faculty building next door, the second phase of renovation will commence. This will involve the expansion and remodeling of the entire library, including new wiring, lights, and new heating and cooling systems. The staff will be working with the contractor in all phases of the project.

In this second year of the microcomputer era for the Faculty's Library, more programs will be added to improve efficiency of library operations. It is projected that the billing functions for library services will be completely computerized, saving hours of staff time.

Major efforts will be made to expand the services of the library that can be sold to outside organizations and individuals. The intention is to maintain both the quality and quantity of medical library services available to Faculty members, and to increasingly finance these activities with incomes generated from the sale of these services to others.

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Long-Term Care and Geriatrics

The Committee on Long-Term Care and Geriatrics continued its active schedule this past year with emphasis on keeping physicians abreast of rapidly changing issues affecting the elderly. The Committee met with the Review Director of the PRO and the President of the Visiting Nurse Association of Baltimore to discuss problems of the elderly regarding early discharge from acute care hospitals and problems relating to increased use of ambulatory surgery.

In September the Maryland Report on Alzheimer's Disease and Related Disorders compiled by the Governor's Task Force was distributed to Committee members. The Committee met with the Director and Psychiatric Consultant of the Meridian-Heritage Nursing Center who presented information regarding data compiled on the presence of mental illness within nursing homes. The Committee also was provided with information concerning this facility's program for patients with Alzheimer's Disease.

Additionally, the Committee met with the Director of the Medical Assistance Compliance Administration and the Administrator of the Long Term Care Program of the Maryland Medical Assistance Program for a detailed discussion concerning Nursing Home Transmittal No. 46—Federally Mandated Utilization Control Requirements.

In January the Committee met at the Edenwald facility in Towson, which is an extension of the General German Aged Home in Catonsville. Information was presented to the Committee from the Assistant State Director of the American Association of Retired Persons with regard to Health Maintenance Organization programs.

In May an excellent turn out of Medical Directors of Long Term Care Facilities attended the Eighth Annual Medical Director's meeting and heard detailed representations concerning pertinent socioeconomic issues. Delegate Larry Young addressed the group on recent legislation concerning the elderly.

In closing, I extend my sincere appreciation to the members of this Committee who have given their valuable time and services to these important matters.

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Maryland Medical Journal

Mr. President and Members of the House of Delegates:

This report covers the period August 1985 to August 1986, during which *MMJ* continued its excellent health and growth. While the *number* of local ads has decreased by about 30 percent over the past year, the percentage of advertising pages to text pages (according to Post Office Statements of Mailing) remains about the same. In general, pharmaceutical advertising is quieter than usual due to the temporary dearth of new products. However, the State Medical Journal Advertising Bureau (SMJAB) assures us that prospects for

1986 are rated as good to excellent. Board policy dictates that advertising be no more than 60 percent of an issue; over the past eleven months it has ranged from 44 percent to 62 percent.

Waverly Press continues to provide a satisfactory local printing service.

In October 1985 subscription rates for nonmembers were raised from $12 to $24, foreign from $23 to $30, and single copies from $2 to $3.

The Editorial Board met twice during the past year to consider items that merited group attention. Approximately 79 manuscripts were reviewed; the rejection rate was about 19 percent. In 1986 we have received about 30 percent more articles than last year at this time.

Several new departments have begun since our last Annual Report: "Insurance Monitor" (July), "Today's Psychiatry" (September), "Letters to the Editor" (January 1986), "Executive Committee and Council Actions" (aka "Your Medical Faculty at Work") (February 1986), and "Pediatric Morning Report" (April 1986). "MIEMSS: Topics of Interest" was resurrected in December 1986 with Carl A. Soderstrom MD as Topics Editor.

The October 1985 issue, "Healthy Mothers/Healthy Babies," was the fourth dedicated issue guest edited by the Center for Health Education staff. CHE bought 200 copies of the complete issue; the March of Dimes Birth Defects Foundation bought 6,000 copies of an abridged, 40-page reprint of the issue.

MMJ's May 1986 issue featured two public health update articles: a comprehensive review of acquired immunodeficiency syndrome (AIDS), including an extensive bibliography; and Tuberculosis Control Program Guidelines, provided by the Office of Disease Control and Epidemiology of the Maryland Department of Health and Mental Hygiene.

Editorial Board member Frank L. Iber MD resigned because he moved to Chicago at the end of June 1986; DeWitt E. DeLawter MD will complete Dr. Iber's term.

Everyone associated with the production of *MMJ* continues to welcome comments from Med-Chi members regarding any and all facets of the magazine. As has always been the case, the rationale for any editorial decision will be shared with anyone having an interest in *MMJ*. The Editorial Board and the Managing Editor thank the many outside reviewers of manuscripts who so graciously have donated their time and expertise in assisting the Editorial Board in this important function over the past year. We also appreciate the careful attention of individual department editors who monitor their columns for scientific accuracy and correct citations.

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Maryland Medical Political Action

Mr. President and Members of the House of Delegates:

In the past year since I became Chairman of the Board of Directors, the Maryland Medical Political Action Committee has actively supported a number of candidates. As 1986 is an election year, we are keenly aware of the political scene and hope to help elect candidates with political views compatible with our medical society.

Several members of the Board and staff attended the Political Education Conference conducted by AMPAC and the AMA in Washington in September 1985. This highly informative annual event features such national leaders as the President of the National Education Association, Chairmen of the Republican and Democratic National Committees, and a national political correspondent.

Another worthwhile program offered by AMPAC is the Campaign Managers' School, which this Chairman attended. This was so successful that a second program was held in February.

In recent months, the Board has interviewed several Congressional candidates. Many candidates lack knowledge in the area of medical legislation and often come to the interview unprepared for the questions posed by Board members. We believe our purposes are served in bringing important medical issues to their attention. Choices for support are difficult; Board members are often divided in their loyalties and in their perception of the value of the candidates being interviewed. It becomes apparent at these times that the bipartisan composition of our Board is indeed beneficial in supporting the best candidate for the medical society.

Many component societies have held meetings with candidates from their own districts, a practice heartily encouraged by the Board. There is nothing like grassroots contact and the support of a candidate by his/her own constituents. Please get involved now. This activity occurs only every four years.

During this important state legislative session, many MMPAC members did their homework and contacted their legislators concerning specific issues. We are working closely with the Legislative Committee of Med-Chi and plan to coordinate our efforts even better in the future through a new Government Affairs Department.

The Auxiliary has been working diligently on our behalf in this past year. Their voter registration drive has been especially effective in covering every county; we have on the Med-Chi computer at least 14 counties showing physician voter registration according to their districts. In addition, Auxiliary members were espe-

cially active in Annapolis this year tying together their political and legislative activities.

One of the newer techniques for contributing to worthy candidates is the conducting of benchmark surveys by AMPAC on behalf of the candidate. These are given a monetary value, depending on the length of time the results are held before being released to the candidate. Three of Maryland's Congressional candidates have taken advantage of this innovative program.

MMPAC now boasts 1,013 sustaining members, as contrasted with 776 last year. Contributions from physicians and spouses are divided, according to whether they are received in corporate or personal checks, into what we call "hard" or "soft" dollars. Corporate checks cannot be used for national elections and therefore are kept in Maryland to support candidates for statewide offices. Personal checks, however, are used to support candidates for national office, and those who contribute with personal checks automatically become members of AMPAC. The choice is yours, and we encourage each of you to send in your contribution now if you have not already, so that your voice will be heard on behalf of the medical profession.

The *MMPAC NEWSLETTER* continues to be an informative and useful tool for recruiting members. Mrs. Mildred Taylor has assumed the position of Editor of the *NEWSLETTER*, replacing Mrs. Nancy Lee Smoot who held this job for several years. We thank Mrs. Smoot for her past service and devotion, and we welcome Mrs. Taylor for offering her assistance for a demanding and often difficult job.

I thank all the members of the Board of Directors for their helpful advice and cooperation this past year and for their sharing the responsibilities of the Board in meeting the stated purposes of the MMPAC. I hope the coming year will see even more activity and the results of that activity will become obvious not only to members of the medical society but also to candidates for elective office.

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Med-Chi Insurance Fund

Mr. President and Members of the House of Delegates:

The Med-Chi Insurance Fund directors met 6 times in 1985 to carry out their responsibility of directing the operation of the Med-Chi Agency and monitoring the sponsored insurance and financial planning programs.

In 1985, the Agency became a franchised broker for the Medical Mutual Liability Insurance Society in the Baltimore City and Baltimore County metropolitan area, resulting in a greater market share and increased earnings to the Agency.

Financial planning was added in 1985. This service is provided to the Faculty membership by trained financial planners of PSA Financial, Inc. Many requests from the members resulted in the establishment of this service.

The Hartford plan of Major Medical and weekly disability coverage was improved in 1985. The Major Medical Expense maximum benefit was increased from $250,000 to $1 million. Also, all limitations on semiprivate room and board costs were removed.

A new group life insurance plan underwritten by the Manhattan Life Insurance Company was established effective October 1, 1985. It is the same plan provided to the National Football League. The rates are very low for healthy subscribers with good health habits.

The Med-Chi Agency was very successful in 1985. The profits ultimately will benefit the entire Faculty membership. The enthusiastic participation of the members will enable the Med-Chi Agency to continue to provide the best products and services for Maryland physicians.

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RICHARD F. MOSCHELL MD
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JOSEPH J. HARRISON Secretary

Medicine and Religion

Mr. President and Members of the House of Delegates:

The Medicine and Religion Committee met twice this past year. The Third Annual Prayer Luncheon was held during Med-Chi's 188th Annual Meeting. Reverend Carl Heim Greenawald spoke on "Cross, Caduceus, and the Current Crisis."

The Committee also surveyed most of the hospitals

in the state to determine if they had code guidelines, an ethics committee, and a chaplaincy service. The results of this survey are being reviewed.

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Medicolegal

Mr. President and Members of the House of Delegates:

This past winter and spring the Medicolegal Committee, sponsored jointly by the Medical and Chirurgical Faculty of the State of Maryland, the Maryland State Bar Association, and the Baltimore City Bar Association, has been busy. It has continued its service to the medical and legal disciplines by considering and making recommendations in disputes among and between physicians and attorneys. In addition to rendering advisory opinions on complaints from either discipline, it has conducted a number of binding arbitrations under a new method of dispute resolution that became effective in early 1984. These arbitration matters are conducted by a two-person arbitration panel of one physician and one attorney who investigate and consider a complaint and then make a final ruling, ending the matter. This procedure is voluntary, but the decision is binding.

The Committee also sponsored and presented a program at the annual meeting of the Medical and Chirurgical Faculty of Maryland on April 17, 1986 entitled, "Liability and Important Legal Issues in the Hospital." The topics presented were informed consents, agency and hospital liability-independent health care providers and HMOs, hospital-physician anti-trust problems, and new medical ethics in the hospital. The panelists were distinguished and knowledgeable physicians, judges, and attorneys. The program was well received.

Med-Chi and the two bar associations have approved a form of Authorization and Assignment formulated by our Committee, which presents an approved tripartite form that may be used among attorneys, clients, and physicians to assist in establishing an early ongoing relationship between the disciplines in personal injury claims' cases. This form was published in the *MMJ* in the May 1986 issue on page 349.

Med-Chi and the MSBA each contributed $150 as a matching grant to honor Elliott Fishel MD, who died in May 1985. He was an active member of the Medicolegal Committee for many, many years and helped shape the affairs of our Committee. He also was President of the City Medical Society. His many contributions are being recognized by this contribution to the Baltimore City Medical Society for a scholarship fund in his name to assist medical students.

The Committee's Executive Board continues to meet between meetings of the Committee as a whole.

ARTHUR KAUFMAN MD, Co-Chairman
BAYARD Z. HOCHBERG, ESQ., Co-Chairman
BRUCE P. BOLLENS MD
STEVEN J. BRAND MD
ROBERT BRIGHT MD
EDWARD CORNFELD MD
EDWIN C. FULTON MD
H. JACK HUDSON MD
ROBERT O. KAN MD
CURTIS MARSHALL MD
G. ROBERT MEDALIE MD
VINCENT O'DONNELL MD
ISRAEL WEINER MD
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PHILIP A. DALES, III, ESQ.
C. CAREY DEELEY, Jr., ESQ.
BROUGHTON M. EARNEST, ESQ.
WILLIAM H. ENGELMAN, ESQ.
JOHN WHEELER GLENN, ESQ.
MAX R. ISRAELSON, ESQ.
H. ALBERT KORN, ESQ.
JEANNETTE PLANTE, ESQ.
VICTORIA SELPH, ESQ.
JEFFREY SHANE, ESQ.

Nominations

Mr. President and Members of the House of Delegates:

For presentation to the House of Delegates, Wednesday, April 16, 1986.
(Those elected will assume office at conclusion of the Annual Meeting, 1987, unless otherwise indicated.)

President-elect
Leon E. Kassel, Baltimore, Baltimore City
(President-elect, 1986–87)
(President, 1987–88)

First Vice-President
Reynaldo L. Lee-Llacer; Clinton, Prince George's County

Second Vice-President
Leslie R. Miles, Jr., Lonaconing, Allegany County

Third Vice-President
Hilary T. O'Herlihy, Glen Burnie, Anne Arundel County

Secretary
Raymond M. Atkins, Baltimore, Baltimore City

Treasurer
Jose M. Yosuico, Laurel, Baltimore City

Committee on Scientific Activity (6-year term)
Gerhard Schmeisser, Baltimore, Baltimore City

Library and History Committee (5-year term)
John W. Buckley, Timonium, Baltimore County

Finney Fund Committee (5-year term)
Daniel C. Finney, Baltimore, Baltimore City

Board of Medical Examiners (4-year term)
Daniel I. Welliver, Westminster, Carroll County
(July 1, 1986–June 30, 1990)
Arthur T. Keefe, Jr., Chestertown, Kent Co.
(July 1, 1986–June 30, 1990)
Delegates to the AMA
Albert M. Antlitz, Baltimore, Baltimore City
(January 1, 1987–December 31, 1989)
Roland T. Smoot, Baltimore, Baltimore City
(January 1, 1987–December 31, 1989)
Alternate Delegates to the AMA
Philip L. Schneider, Laurel (Resident)
(January 1, 1987–December 31, 1989)
Vacancy (Student)
(January 1, 1987–December 31, 1989)

Nominating Committee

GEORGE S. MALOUF **MD, Hyattsville, Chairman**
KARL H. WEAVER **MD, Baltimore, Baltimore City District**
BENJAMIN DEL CARMEN **MD, Towson, Baltimore County District**
MARVIN SCHNEIDER **MD, Wheaton, Montgomery County District**
RONALD C. KRETKOWSKI **MD, Riverdale, Prince George's County District**
AUBREY C. SMOOT **MD, Salisbury, Eastern District**
GERALD J. SCHIPPER **MD, Frederick, Western District**
DAVID S. O'BRIEN **MD, Annapolis, Southern District**
JACQUELINE LORD **MD, Westminster, Member-at-Large**

Occupational Health

Mr. President and Members of the House of Delegates:

The Committee met eight times during the past year. The "Suggested Guidelines for What Should be Included in an Impairment/Disability Evaluation Report," listed below, were completed by the Committee and approved by Council on January 30, 1986. These guidelines were sent to the Worker's Compensation Commission for review and comment, and distribution is under discussion by the Committee.

The Subcommittee on Medicine, Employee, and the Workplace continues to review employee absence abuse with representatives from industry.

Suggested Guidelines for What Should Be Included in an Impairment/Disability Evaluation Report

Preamble

The report is intended to conform to the existing Maryland laws, particularly in reference to workers' compensation. Use of this form in other jurisdictions, for other purposes or in other settings might require modification.

Definitions

Impairment Medical impairment is an alteration of health status assessed by medical means. This determination is based on a complete basic data base, appropriate physical and mental status examinations, and all available additional findings that relate to the patient's/worker's condition or state of being and how that impacts on his/her overall level of functions.

Disability This term attempts to combine the impairment with the specific work-related factors including degree of employability, jobs available, educational background, and social circumstances.

Basic Data Base

These should include:
- Name
- Age
- Height
- Weight
- Sex
- Educational background
- Place of employment
- Job description
- A detailed occupational history
- A complete medical history including alleged illness, injury, or disorder
- Mechanism of injury
- Premorbid functioning
- Patient's present illness
- What treatment has been done
- How the patient is responding to said treatment and if treatment is completed
- Previous injuries

Objective Findings

The physician should conduct a physical and mental status examination of the patient relative to the impairment and should report all findings.

Appropriate Ancillary Studies and Their Findings

Impression

Summary

a. Extent of findings
b. Base impairment rating on the findings
c. Detailed rationale of what impairment is based on
d. Prognosis

•••

MICHAEL K. SPODAK **MD, Chairman**
TIMOTHY D. BAKER **MD**
HERBERT L. BLUMENFELD **MD**
S. CHANARONG **MD**
PETER CHODOFF **MD**
ADOLFO CORREA-VILLASENOR **MD**
JOSE B. CORVERA **MD**
JAMES FRENKIL **MD**
SIDNEY R. GEHLERT, Jr., **MD**
DEBORAH L. GOLDBERG **MD**
DAVID B. GOLDEN **MD**
GEORGINA Y. GOODWIN **MD**

ENRIQUE A. HERRERA MD
FERDINAND G. MAINOLFI MD
EMMANUEL M. MANIAGO MD
CHRISTIAN S. MASS MD
JOSE C. MUNIZ MD
MICHAEL D. POTASH MD
JOSE G. PUIG MD
MARK A. REISCHER MD
NORMAN B. ROSEN MD
HENRY S. SABATIER MD
HENRY M. SCAGLIOLA MD
ROSE M. SESSOMS MD
ROLAND T. SMOOT MD
ANDREW S. TEGERIS MD
JOSEPH A. THOMASINO MD
BORIS G. VLALUKIN MD
EDWIN W. WHITEFORD MD

Peer Review

Mr. President and Members of the House of Delegates:

The work of this Committee has continued and intensified under the publicity and attention given by the State Legislature and the public. It has become evident that the procedures and accomplishments of this Committee will remain under intense scrutiny for at least the next several years. The Governor's Task Force on Professional Liability has much to say about peer review activities and has made suggestions for its improvements. Senate Bill 560 sets out certain reporting requirements by hospitals and by the Health Claims Arbitration Panel that are expected to increase greatly the workload of this Committee. It behooves physicians of the Committee and other members of Med-Chi to pay attention to this scrutiny with the understanding that, as patients and their representatives become more sophisticated, the procedures of the Committee must keep pace if it does not wish the whole system to revert to the public sector.

The volume of new cases coming before the committee has increased, and more site visits and personal interviews have been conducted than in the past. An informal review of committee activities shows:

Cases referred directly from the Commission	27
Physicians interviewed	9
Records reviewed	15
On-site reviews	17
Referrals from other sources	5
Referrals to component or specialty societies	5

These figures reflect more than one category in a single review in many cases. The figures do not reflect those cases referred directly to component societies by the Commission, the assistance of specialty societies in many cases, or single patient complaints that are referred to another committee for resolution.

Since it is impossible to have every specialty represented on the Committee, more and more societies are being requested to assist in these reviews by providing consultants to the committee. More of this cooperative action is anticipated in the coming year.

A meeting was hosted by the Committee for members of component and specialty societies and for representatives of the Commission on Medical Discipline and the Office of the Attorney General. Discussion was held concerning the need for complete and detailed reporting and for the need to reduce both investigation and prosecution time. One criticism of our procedures has been the length of time between receipt of a complaint by the Commission and its resolution through formal or informal hearings by the Attorney General's office. Steps are being taken to close the gaps and set up more efficient schedules.

Members of this Committee have been faithful in attendance and have worked many personal hours in making site visits and pouring over medical charts. The chairman expresses his gratitude to all members and to Med-Chi staff for its able assistance in the administration of the committee.

EMIDIO A. BIANCO MD, Chairman
WALTER J. ALT MD
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WILLIAM A. CASSIDY MD
RONALD COHEN MD
LIEBE S. DIAMOND MD
PABLO E. DIBOS MD
EARLIE H. FRANCIS MD
CHRISTOPHER HARVEY MD
GEORGE HENNING MD
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SHERMAN KAHAN MD
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ELLIS MEZ MD
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ERNESTO RIVERA MD
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LARRY G. TILLEY MD

Physician Assistants

This marks the first Annual Report of the Committee on Physician Assistants, which was established as a full standing committee of the Faculty House of Delegates at its September 28, 1985 session.

While the Committee has had several meetings, its primary activity was to review and monitor legislation introduced by the Maryland Academy of Physician Assistants and known as the Maryland Physician Assistant Act. After significant negotiation involving the Board of Medical Examiners, the Department of Health and Mental Hygiene, and the Faculty, the bill passed and has since been signed by the Governor. Administrative Regulations regarding this statute are under development by the Board of Medical Examiners, and their development will be monitored with respect to potential impact on quality of care.

Other activities of the Committee included initiation of a study of peer review programs by organized physician assistant professional associations and consideration of the public relations needs of this allied health profession.

As Chairman, I would like to take this opportunity to thank each physician assistant representative and each Faculty member for his/her work in this particular area.

BERNARD TABATZNIK MD, Chairman
BENJAMIN V. DEL CARMEN MD
HILARY T. O'HERLIHY MD
DULEEP J. PRADHAN MD
SHERRIE BORDEN PA-C
JAMES CAWLEY PA-C
CURTIS DECKER, ESQ.
JEAN GAFFNEY PA-C
DONNA SEWELL PA-C

Physician/Patient Relations

Mr. President and Members of the House of Delegates:

This Committee maintained its active schedule throughout the past year. Essentially, most of the Committee's work involved the review of incidental problems growing out of medical practice and occurring in virtually every area of Maryland. The majority of cases was referred by the Commission on Medical Discipline and without exception reviewed objectively and in accordance with appropriate protocol. The actual number of cases is apportioned as follows:

Cases referred from Commission on Medical Discipline	249
Cases referred from other sources	24
Grievances between physicians	16
Professional association designations reviewed	21

Aside from the above, the Committee and staff responded to innumerable inquiries regarding the practice of medicine and related issues. Raised by the general public and, frequently, by the legal community, these questions range in complexity and always are answered thoroughly and appropriately. I am confident that this particular function is successful in fostering proper communication relative to the physician/patient relationship.

Finally, as Chairperson, I wish to express my sincere gratitude to each member of the Committee for sacrificing time from family and practice to devote toward the betterment of the profession.

LOIS E. WEHREN MD, Chairman
RAYMOND M. ATKINS MD
JACK D. FRANCIS MD
DANILO G. LEE MD
ROBERT A. LISS MD
RAYMUNDO S. MAGNO MD
SIDNEY MIR MD
JOHN C. PAYNE MD
DAVID B. POSNER MD
BENJAMIN ROTHFELD MD
LEX B. SMITH MD
W. HADDOX SOTHORON MD
JOSE M. YOSUICO MD
JAMES G. ZIMMERLY MD

Physician Rehabilitation

Mr. President and Members of the House of Delegates:

This has been a busy year for the Committee on Physician Rehabilitation. A new Chairman was appointed (Michael Hayes MD) and a Program Director was hired (Robert K. White MA, CAC). The Committee itself was reorganized into two subgroups: the Executive Subcommittee and the Panel of Intervenors. The purpose and mission of the Committee, however, have remained the same:

To serve as the primary resource for the evaluation and treatment of impaired physicians: receive reports of impaired physicians; investigate and verify reports in a discreet manner; evaluate and intervene; monitor and follow-up; act in an advocacy role for recovering physicians; administer treatment loan fund; and provide support and education to the families of impaired physicians.

To promote community awareness: make presentations for hospital staff meetings, component societies, and auxiliary meetings; organize seminars on related material such as "The Medical Family"; develop Hospital Wellness Committees; coordinate efforts with other impaired professional groups; and promote awareness among other groups such as the treatment community.

To continue to learn from the National Movement sponsored by the AMA: participate in the National Convention on Impaired Physicians; communicate with the most progressive states such as New Jersey and Georgia; and keep informed of the latest articles on Impaired Professionals through the Medical and Chirurgical computer-search service.

To develop contacts with a wide range of quality treatment services in this region: review all of the major treatment providers in this state; review out-of-state programs specializing in treatment of physicians; and develop a list of appropriate referral options for various problems.

To develop additional funding resources: consult with other state programs to learn from their experiences; approach Med Mutual as the major professional liability insurer in this state; and explore other funding options.

To improve the functioning of the Committee: offer training to the physicians who act as intervenors; develop computerized data base for efficient information management; update policies and procedures; and im-

prove communication between the committee and other medical review bodies.

Some highlights of the past year pertaining to these goals and objectives are: reports to the Committee doubled in 1986 (the average number of reports per month was 2.8 through 1985), thus far in 1986 the average number per month has increased to 6.5; Med Mutual agreed to contribute $20,000 toward the Committee's activities for 1986; three treatment loans were granted for a total of $9,683; the Committee sponsored a seminar on "The Medical Family" in cooperation with the Auxiliary; a two-day training seminar was held for the Panel of Intervenors; Committee members and staff participated in the AMA's National Conference on the Impaired Physician in Chicago; a statewide conference, "Impairment among Professionals," is being organized; and Wellness Committees were formed at St. Joseph's and Frederick Memorial Hospitals. The number of active cases has grown to 81.

Status	Numbers
Being investigated	14
Being evaluated	6
In inpatient treatment	2
In outpatient treatment	25
Being monitored	30
Refusing assistance	4
Total	81

The Committee expresses its sincere appreciation to two persons who have shaped its purpose and activities over the last eight years: Joseph Chambers MD who, as the Chairman for many years, devoted himself untiringly to the aid and support of his suffering colleagues; and Connie Townsend, who has been with the Committee from its inception in 1978. She brought a great deal of savvy, experience, and energy to the Committee. We wish her well in her retirement.

MICHAEL G. HAYES MD, Chairman
H. PATRICK ADAMS MD
RICHARD H. ANDERSON MD
MICHAEL J. BISCO MD
JOSEPH F. CHAMBERS MD
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EDSON B. MOODY MD
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MARTIN J. VALASKE MD
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CHARLES L. WHITFIELD MD
MAURICIO ZEPLO MD
RONALD R. PETERSON
HAZEL CHAMBERS

Hotline 301-727-0120

Number of Physicians Reported by Year and Type of Illness

	1978	1979	1980	1981	1982	1983	1984	1985	May 1986	Total
Alcohol	15	18	15	26	18	13	11	18	8	142
Drugs	10	7	8	3	7	6	10	6	10	67
Alcohol & Drugs	5	2	3	1	2	1	2	3	2	21
Psychiatric	8	8	5	4	7	10	9	8	6	65
Physical	1			1				1	4	7
Total	39	35	31	35	34	30	32	36	30	302

Preventive Medicine and Public Health

Mr. President and Members of the House of Delegates:

The Committee on Preventive Medicine and Public Health met twice during the 1985–1986 year.

The following items were discussed and acted on by its Subcommittees: The *Subcommittee on Immunizations and Infectious Diseases*: reviewed the "Recommended Schedule of Immunizations," reviewed changes in the Maryland State School Immunization Laws, cosponsored a seminar on AIDS at the Annual Meeting, examined the public's opinion on the pertussis vaccine, focused on the Governor's Task Force on Aids, and reviewed pertinent legislative issues before the 1986 General Assembly.

The *Subcommittee on Infant, Child and Adolescent Health*: emphasized the need for seat belt legislation, supported and investigated the need for restraining devices on all new school buses with back of seats at least 28″ high, cosponsored a seminar on "Otitis Media" at the Annual Meeting, and reviewed pertinent legislative issues before the 1986 General Assembly.

The *Subcommittee on Maternal Welfare*: continued a review of maternal deaths in the State of Maryland, reviewed a proposed continuing education program sponsored by the Center for Health Education, surveyed the chiefs of OB/GYN departments of all Maryland hospitals to find out about their individual quality assurance programs, reviewed pertinent legislative issues before the 1986 General Assembly.

The Committee directed correspondence to Governor Hughes requesting an increase in state funding for family planning and promoting state-supported family planning services. The letter was approved and sent by Council in January.

School-based health clinics were discussed.

The Committee requested a public education program on AIDS be established.

Pertinent legislative issues before the 1986 General Assembly were reviewed.

ANNELIES S. ZACHARY MD, Chairman
IDO ADAMO MD
ROBERT ANCONA MD
HECTOR P. C. ASUNCION MD
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RUDIGER BREITENECKER MD
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ABRAHAM SCHNEIDMUHL MD
RUTH L. H. SINGER MD
ANDREW T. WILEY MD

Advisory Member
JAMES TENNEY MD

Professional Ethics

Mr. President and Members of the House of Delegates:

The Committee on Professional Ethics spent another busy year dealing with many diverse patient care issues. The committee developed a new statement addressing patient transfers between hospitals in response to patient "dumping" issues making headlines. The Committee also developed an opinion concerning termination of the physician-patient relationship. The opinion on the free choice of physician and patient was reviewed and updated.

The Committee is dealing with the difficult issue of verification and pronouncement of death in the wake of the battle that took place during the last legislative session in Annapolis. It hopes to have an opinion finished by the fall.

The Committee also presented its first educational program at the Faculty's Annual Meeting in April. The topic was Ethical Dilemmas in the Medical Marketplace. The Committee will present an educational program each year at the Annual Meeting on ethical topics of particular relevance to physicians.

LOUIS C. BRESCHI MD, Chairman
EDILBERTO BELTRAN MD
WILLIE C. BLAIR MD
RONALD CAMERON MD
JACK C. CHILDERS, Jr., MD
NICHOLAS FORIS MD
EUGENE GUAZZO MD
LESLIE R. MILES, Jr., MD
RIVA E. NOVEY MD
FRANK F. SCHUSTER MD
JAMES ANDREW SUMNER MD

PRO Monitoring

Mr. President and Members of the House of Delegates:

This Committee was established and held its first meeting on May 16, 1985 as the result of a Resolution

passed by the Med-Chi House of Delegates at the 1985 Annual Meeting. It represents a revitalization of the former UQCPRO Committee. The resolution called for the Maryland Foundation for Health Care to restudy certain criteria established in the original contract and to revise those criteria found to have potentially adverse effects on the quality of medical care. The Committee was formed to determine whether constraints imposed by the federal government were harmful to patients, or simply inconvenient, and a strain on physicians' income. A bylaws change was necessary and was passed by the House of Delegates at the 1985 Semiannual Meeting. This bylaws revision changed the name from UQCPRO Committee to the PRO Monitoring Committee and modified its charge.

The Committee's first job was to request complaints from physicians concerning patient care under the PRO regulations. Next, meetings were held with representatives of the Visiting Nurses Association and the Director of the Maryland PRO to discuss the impact of the regulations on the elderly as they are affected by home health care agencies. It was learned that these facilities were not being used to the fullest extent, partially because physicians and the public were not aware that such services were available and reimbursable. The State Office on Aging stated it would undertake a campaign to advise the public, and this Committee agreed to inform physicians.

Subsequently, only a few complaints were received from physicians concerning what they perceived as poor patient care due to federal regulations. Each complaint was investigated by the Foundation and, in each case, it was found that no patient harm was done, although there was certainly some inconvenience and some discomfort.

State regulations governing the establishment of hospital utilization review programs were reviewed by the Committee and minor revisions suggested. The final regulations have since been promulgated.

In a recent meeting, the Director of the Maryland PRO met with the Committee and discussed the activities of the PRO. It is his opinion (and one that is shared tentatively by committee members) that quality of care has improved for Medicare patients or at least not deteriorated. Since it began its activity in 1984, the PRO has received no information that any patients have been injured by refusal of admission to hospital or by early discharge. More sophisticated studies are being instigated, however, to try to learn more about this issue. Two objectives of the PRO were discussed by the Committee at this time. One was to reduce admissions to hospitals by increasing ambulatory surgery. This has been accomplished. The second objective was to reduce admissions for inappropriate or unnecessary invasive procedures. There has been a decrease in such procedures, although the cases of inappropriate surgery found in the preceding fifteen months had been negligible, indicating that Maryland physicians have demonstrated good judgment in deciding who should be admitted to the hospital.

No major conclusions could be drawn by the Committee since it was agreed that the data available was insufficient and the length of time the PRO had been in business too short.

The Maryland PRO is required to send quarterly reports to the Health Care Financing Administration and has agreed to furnish copies of those reports to the Committee for study. This is being done. We believe the Maryland PRO is working in the interest of our patients, under the most difficult federal restraints, and we have confidence that our lines of communication will remain open in the future as they have in the past.

The chairman wishes to thank members of the Committee for giving their attention to this very difficult issue, and to staff for its efficient service.

JOSEPH I. BERMAN MD, Chairman
AUGUSTO R. DeLEON MD
MARIO FRIEDMAN MD
DAVID S. McHOLD MD
CLIFTON C. PRESSER MD
RICHARD T. SCHOLZ MD
JOHN A. SINGER MD

Public Relations

Mr. President and Members of the House of Delegates:

The Public Relations Committee was extremely active during the past year. The Committee successfully implemented the 1985–86 long-range public relations plan that included a major advertising campaign to educate the public about Med-Chi and its work to support the legislative professional liability reform effort. The campaign included billboards, posters, print advertisements, and printed brochures.

During the month of March, WBAL Radio and Med-Chi launched a joint Health Tips Campaign. Med-Chi provided the health tips and the physicians to announce the tips. A different tip was aired each day of the month.

The First Annual Medical and Chirurgical Faculty of Maryland Media Awards Program for excellence in medical journalism was successfully implemented this year. The winners in three categories, television, radio, and print, were awarded a plaque and a $1,000 donation to the medical charity of their choice at Med-Chi's Annual Meeting on April 16, 1986. Five Citations of Merit were awarded to reporters in the print and television categories.

The entries were judged by a panel representing the print and broadcast fields as well as three physicians and were rated on the basis of the medical accuracy, significance, quality, public interest, impact, depth of coverage, and journalistic style. The program is part of the Med-Chi's efforts to expand contacts with the me-

dia and gain credibility as the resource for accurate health information in Maryland.

Some other activities implemented this year included distributing health tips to area radio stations monthly, compiling a roster of physician specialists to respond to media inquiries, and meetings with the Editorial Boards of the *Sunpapers* to discuss the malpractice situation.

The Council approved a more ambitious public relations plan for 1986–87 that introduces a number of new objectives in addition to continuing those established in 1985–86.

The Faculty's radio talk show "Consultation" was discontinued in August 1985 due to managerial and financial problems at WBJC. The Committee plans to initiate contacts with the new Johns Hopkins radio station to discuss the possibility of producing a similar program. The Faculty also continued to sponsor a radio program on WCBM with Albert M. Antlitz MD as the medical consultant for 1985–86.

The Faculty continued to send a bimonthly newsletter to former school #49 graduates to keep them abreast of renovation progress and reunion plans. The Reunion Committee has been meeting regularly and the reunion is scheduled for Sunday, September 14, 1986 at the Meyerhoff Symphony Hall.

On January 15, 1986, Susan Peterson, President of Susan Peterson Productions, conducted a dynamic Speaker's Workshop for medical society leadership. The workshop was designed to train physicians to speak before the public, legislators, and the media. Five physicians participated in this year's workshop and found the experience very valuable.

The Committee sponsored a session entitled, "Irresistible Communication: Creative Skills for Health Professionals," at the Annual Meeting. The session examined some unusual, indirect, and creative techniques health professionals can use to enhance physician/patient communication. Charles M. Citrenbaum PhD clinical psychologist in private practice and faculty member, The Educational Center, Sheppard and Enoch Pratt Hospital, conducted the seminar.

During the Annual Meeting, the Public Relations Committee submitted a report on Resolution 2A/85 to the House of Delegates. A subcommittee of the Public Relations Committee met regularly during the past year to generate ideas for implementing Resolution 2A/85. The subcommittee determined that public relations and educational efforts must be directed at both the profession and the public. As part of the effort to implement Resolution 2A/85, a questionnnaire was inserted in the President's Letter to determine how Med-Chi can help members better communicate with their patients.

The Sixth Annual Photo Contest once again received active support with seventeen Faculty and Auxiliary members entering a total of forty-four photographs in the black-and-white and color categories.

The judges this year were Leslie Wies, Associate Director for the Dalsheimer Gallery on Charles Street in Baltimore and Ed Wortek, Professor of Arts and Communications at Goucher College.

Winners for 1986 were Jerrold M. Post MD, first place, color category; David Paul MD, second place, color category; Nancy O. Whitley MD, first place, black-and-white category; and Edgar Campbell MD, second place black-and-white category. The winners were announced at the 1986 Annual Meeting's House of Delegates and later received gift certificates from the Dalsheimer Gallery.

JAMES E. BELL **MD, Chairman**
JONATHAN M. ADELSON **MD**
FREDERICK ALPERN **MD**
RICHARD R. BABKES **MD**
WILLIAM A. CASSIDY **MD**
EDWARD CORNFELD **MD**
WILLIAM J. DUNSEATH **MD**
WILLIAM DVORINE **MD**
JOSEPH FORTUNA **MD**
DAVID B. K. GOLDEN **MD**
GAY M. GUZINSKI **MD**
ROBERT LEE HENDERSON **MD**
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ANTOINE E. KFURI **MD**
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FRED MAGAZINER **DDS**
DAN K. MORHAIM **MD**
HIROSHI NAKAZAWA **MD**
BEN OTEYZA **MD**
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GHOLAM SADJADI **MD**
SIMON V. SCALIA **MD**
BERNARD R. SHOCHET **MD**
NEIL SOLOMON **MD**
MARGARET SNOW **MD**
THERESA M. VOGEL **MD**
MARGARET A. WEISS **MD**
MILDRED TAYLOR, **Auxiliary**

Scientific Activity

Mr. President and Members of the House of Delegates:

The Committee on Scientific Activity started the year with the 1985 Semiannual Meeting at the Southampton Princess Hotel in Bermuda, September 1–8. An excellent scientific program was presented, offering 18 hours of Category I CME Credit. It was considered to be a very successful Semiannual Meeting by the 168 attendees, who enjoyed an informative and interesting scientific program, group social events, and almost perfect weather for all recreational activities.

During the year the Committee reviewed 32 requests for cosponsorship for CME credit from various organizations. Thirty-one were approved, and one was denied cosponsorship because of failure to meet the criteria set forth by the Accreditation Council on Continuing Medical Education.

The American Health Care Revolution was the theme of the 1986 Annual Meeting held at the Baltimore Convention Center in April. The Baltimore Marriott

Inner Harbor Hotel was used as the headquarters hotel. As it had just come under the management of the Marriott Corporation, there were some problems connected with the start-up of a new operation; however, the hotel did a good job of handling the Presidential Banquet honoring J. D. Drinkard MD, the out-going President. Attendance at the banquet was excellent, but created an uncomfortably crowded reception in the prefunction area.

All scientific sessions and exhibits were held at the Baltimore Convention Center. The overall attendance was comparable to 1985 in that 1,057 physicians attended, as compared to 1,066 in 1985, with a total attendance of 1,984 in 1986 and 1,905 in 1985. Attendance has been generally the same whether the Annual Meeting is held at the Hunt Valley Inn or in downtown Baltimore. The meeting opened on Wednesday morning with William Donald Schaefer, Mayor of the City of Baltimore bringing Welcoming Remarks to the House of Delegates. A Memorial Tribute to John Sargeant, CAE, Executive Director of the Medical and Chirurgical Faculty of Maryland, who died in November 1985, was presented by his family, staff, and physician/friends at the first House of Delegates Meeting.

The Prayer Luncheon and Lunch and Learn were presented on Wednesday and Thursday, respectively. Attendance was not optimal in either function: 65 for the Prayer Luncheon and 168 for the Lunch and Learn Session. These activities will be re-evaluated for the 1987 Annual Meeting.

Forty-two specialty societies, faculty committees, or special-interest groups sponsored sessions at the Annual Meeting. While overall attendance has remained the same for the past several years, there were fewer people in each session this year because there were a large number of concurrent sessions. The Committee is discussing ways to alleviate low attendance in the individual sessions for the 1987 Annual Meeting.

Edward N. Brandt MD, PhD, Chancellor, University of Maryland at Baltimore, Keynote Speaker for the Plenary Session, delivered an important talk on the "American Health Care Revolution," with key trends being highlighted and developed by Richard J. Davidson, President of the Maryland Hospital Association, and Carl J. Sardegna, President and CEO, Blue Cross and Blue Shield of Maryland. Malpractice and other legal issues were featured in a number of the presentations.

Eighty-three technical exhibits, offering a variety of goods and services to the medical profession were displayed at the meeting. Eighteen scientific exhibits also were featured. Fifteen hours of Category I CME Credits were offered.

The 1986 Semiannual Meeting is planned for Montreal, September 10–14, and Quebec City, September 14–17. An interesting scientific program featuring speakers from Maryland, from McGill University in Montreal, and from Laval University in Quebec City has been planned. A variety of extracurricular activities will be offered.

The 1987 Annual Meeting is scheduled for April 29–May 1, at the Omni International Hotel, in downtown Baltimore. A number of interesting activities are under consideration to help make this a successful meeting.

The Committee on Scientific Activity very much appreciates the assistance given to make this a successful year and wishes to thank the many individuals who gave so willingly of their time and effort.

C. EARL HILL **MD, Chairman**
J. COURTLAND ROBINSON **MD**
JOHN M. KRAGER **MD**
GARY L. ROSENBERG **MD**
JACK ZIMMERMAN **MD**
ERNEST HARMON **MD**
MRS. MARY E. McGIBBON, **Director of Convention Services**
MS. M'LOU SCHRAM, **Assistant Director of Convention Services**

Secretary

Mr. President and Members of the House of Delegates:

The year 1985–86 has been very active for this office. There has been an increase in staff work due to the additional legislative activity. The staff has been effective in servicing the Faculty during this increase in workload. In addition to the above, the staff has performed all of the regular activities of the Faculty.

I wish to thank the Auxiliary for their support, especially in the preparation of the items to be distributed through the mail. The Auxiliary assisted the Faculty staff in accomplishing several important projects. This year has been especially interesting, for I've had the opportunity to travel throughout the state accompanying the Auxiliary President. We have been received warmly and have enjoyed visiting the components. My sincere thanks for your hospitality and enthusiasm this year.

In concluding, I thank the membership for their trust and support during this past year.

BERNARD S. KARPERS, Jr., **MD**
Secretary

Tel-Med

Mr. President and Members of the House of Delegates:

Maryland Tel-Med is part of a nationwide network of 350 telephone information programs throughout the United States, Canada, South America, and Saudi Arabia. Tel-Med, Inc., is a wholly owned subsidiary of the San Bernardino, California, County Medical Society. The Medical and Chirurgical Faculty is the Statewide Coordinator of seven operating programs in Maryland. The Faculty helps new programs begin operation, reviews and develops scripts for the Maryland Master

Library, and in cooperation with Blue Cross and Blue Shield of Maryland, assists in funding local programs.

Program Activity

Maryland Tel-Med lost a unique Tel-Med program during the past year. The Prince George's County Library Tel-Med program, housed at the Prince George's County Library in Cheverly since 1977, discontinued its services on May 31, 1985. The P.G. County program was the first Tel-Med Program in the United States to provide Tel-Med service for deaf and hearing-impaired persons.

Idea Exchange

The Anne Arundel General Hospital Tel-Med Program hosted the fifth Annual Tel-Med Idea Exchange on May 23, 1986. Representatives from all seven Maryland programs attended.

The group explored successful promotional techniques being used by several Maryland programs. Other topics discussed at the meeting included Tel-Med tape ordering procedures, script development, equipment maintenance, and the development of a statewide brochure.

Cancer Information Services

Maryland Tel-Med is a participant with the Johns Hopkins University Hospital in a Cancer Information Service (CIS) pilot project. At present, many Maryland programs participate in the project that gives Tel-Med callers additional information about the Cancer Information Service in Maryland. This pilot program is sponsored jointly with the National Cancer Institute. Maryland is the first location to use the Tel-Med service to acquaint the public with CIS.

Services to the Handicapped

Maryland Tel-Med includes 26 scripts from the Access-Info Library. Placement of the scripts is a joint cooperative effort with the office for the Coordination of Services to the Handicapped for the State of Maryland.

Maryland Master Library

In 1985-86 approximately 12 new scripts were accepted into the Maryland Master Library, and 26 were reviewed and reapproved.

Maryland *Tel-Med Newsletter*

Now in its seventh year of publication, the Maryland *Tel-Med Newsletter* continues to be the primary communication vehicle for the Tel-Med programs throughout the state. All programs are encouraged to submit information and ideas for inclusion in the newsletter. The newsletter is distributed quarterly to hospitals, medical societies, libraries, health departments, and specialty foundations.

Organization

The daily activities of Tel-Med, including newsletter publication, script development and revision, and new program development, are conducted by Nina Casey, staff member of the Medical and Chirurgical Faculty. Members of the Tel-Med Advisory Committee are responsible for major policy decisions. Members serving in the 1985-86 year were: C. Earl Hill MD; Ruth Mednick, Howard County Department Citizen Service; Elizabeth Duverlie, Maryland Hospital Education Institute; Carmine Valente, Center for Health Education; J. Roy Guyther MD; and Edward D. Layne MD.

All contributions to the Maryland Tel-Med program are received by the Medical and Chirurgical Faculty Charitable Fund, Inc., and are tax deductible. Inquiries about the program should be directed to Maryland Tel-Med, 1211 Cathedral Street, Baltimore, MD 21201, or contact Nina Casey at 301-539-0872 or 1-800-492-1056.

Program Statistics

Location: Anne Arundel General Hospital, Annapolis, MD
Date of Implementation: September 12, 1983
Funding Sources: Blue Cross and Blue Shield of Maryland; Annapolis Lions Club, Hospital Auxiliary
Call Volume: 647 calls/month
Community Services: Distribution of brochures to hospitals, schools, civic associations, the county health department, and at local health fairs; Tel-Med is included in the hospital Speakers Bureau; Tel-Med bookcovers distributed in area high school
Hours of Operation: 24 hours a day, 7 days a week
Tel-Med Number: 301-263-7755
Contact Person: Lisa Hillman, Public Relations Director 301-267-1480

• • •

Location: Giant Food, Inc., Landover, MD
Date of Implementation: February 15, 1984
Funding Sources: Self-funded
Call Volume: 4,733 calls/month
Community Services: Distribution of brochures in Giant Food Stores and to area businesses; advertisements in the newspaper
Hours of Operation: Monday thru Friday, 9 a.m. to 8 p.m.; Saturday, 9 a.m. to 6 p.m.
Tel-Med Numbers: 341-8000—Washington Area (toll free) 995-8000—Baltimore Area (toll free)
Contact Person: Eileen Katz, Manager, Consumer Affairs 301-341-4367

• • •

Location: Memorial Hospital, Easton, MD
Date of Implementation: March 26, 1981
Funding Sources: Blue Cross and Blue Shield of Maryland; Upper Shore Aging; Memorial Hospital Junior Auxiliary
Call Volumes: 378 Calls/Month
Community Services: Part of Community Outreach Education Program; brochures distributed at public buildings, schools, churches, library health department and local health fairs
Hours of Operation: 7 days a week, 8 a.m. to 11 p.m.
Tel-Med Number: 301-822-9198
Contact Person: Karen Myres, Director of Health Education Center 301-822-1000

• • •

Location: Peninsula General Hospital Medical Center, Salisbury, MD
Date of Implementation: February 17, 1983
Funding Sources: Wicomico County Medical Society, Blue Cross and Blue Shield of Maryland, The Purnell Foundation, The Perdue Foundation, Mental Health Council
Call Volumes: 139 calls/month
Community Services: Distribution of brochures to various community locations and to patients admitted to the hospital; articles in the hospital newsletter and advertisements in the local newspaper.
Hours of Operation: Monday thru Friday, 5 p.m. to 8 p.m.
Tel-Med Number: 301-546-2857
Contact Person: Donna Richardson, Director of Development and Community Relations 301-546-6400

• • •

Location: Provident Hospital, Baltimore, MD
Date of Implementation: June 7, 1980
Funding Sources: Morris Goldsecker Foundation, United Way, Blue Cross and Blue Shield of Maryland (printed brochures)
Call Volume: 1,000 calls/month
Community Services: Part of health education program; direct lines into Tel-Med from BWI Airport, Morgan University, and Coppin State College; placement of brochures in community locations such as senior citizen centers and churches; service offered to hospital inpatients
Hours of Operation: Monday thru Friday, 9 a.m. to 5 p.m.
Tel-Med Number: 301-728-2900
Contact Person: Sarah Dildy, Director of Telecommunications, Safety and Security 301-578-2099

• • •

Location: St. Mary's County Health Department, Leonardtown, MD
Date of Implementation: March 1, 1984
Funding Source: Blue Cross and Blue Shield of Maryland (printed brochures)
Call Volume: 334 calls/month
Community Services: Brochures distributed to public and parochial schools, local businesses, through the Family Services Program at the Naval Air Station, and included in the Health Department's "Wellness" project; radio public service announcements; speaking engagements with local businesses and civic and community organizations; immunization project in the St. Mary's County Hospital; outdoor magnetic sign advertising
Hours of Operation: Monday thru Friday, 8:30 a.m. to 4:30 p.m.
Tel-Med Number: 301-862-4170
Contact Person: Mary Novotny, Tel-Med Coordinator 301-475-8921

• • •

Location: Washington County Hospital Association, Hagerstown, MD
Date of Implementation: November 27, 1984
Funding Sources: Washington County Medical Society and Blue Cross and Blue Shield of Maryland
Call Volume: 157 calls/month
Community Services: Distribution of brochures through Washington County Tourism Inc., as well as to churches, schools, banks, area businesses, local industries, and doctors' and dentists' offices; radio and television interviews; speaking engagements with local service groups, and articles in the local newspaper
Hours of Operation: Monday thru Friday, 9 a.m. to 5 p.m.
Tel-Med Number: 301-824-8800
Contact Person: Myra Binau, Coordination of Library Services 301-824-8801

Treasurer

Mr. President and Members of the House of Delegates:

The financial books and records of the Faculty were audited for the year ended December 31, 1985 by the certified public accounting firm of Bennett, Labrador, O'Dea, and Posey, P.A. The audited financial reports reflecting the results of operations for the year and the financial position of the Faculty at year end are published in this issue of the *Maryland Medical Journal* in compliance with the Bylaws.

The 1986 Budget is presented for your information. Approved by the Council in January, it anticipates a favorable balance of income in excess of expenditures.

JOSE M. YOSUICO MD

Bennett, Labrador, O'Dea & Posey, P.A.
CERTIFIED PUBLIC ACCOUNTANTS

The Medical and Chirurgical Faculty
of the State of Maryland
Baltimore, Maryland

We have examined the balance sheet of The Medical and Chirurgical Faculty of the State of Maryland as of December 31, 1985 and the related statement of income, expenditures and transfers, and changes in fund balances for the year then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. The financial statements of The Medical Chirurgical Faculty of the State of Maryland for the year ended December 31, 1984 were examined by other auditors whose report dated May 8, 1985, expressed an unqualified opinion on these statements.

In our opinion, the financial statements referred to above present fairly the financial position of The Medical and Chirurgical Faculty of the State of Maryland as of December 31, 1985 and 1984 and the results of its operations and the changes in its fund balances for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Bennett, Labrador, O'Dea & Posey, P.A.

June 30, 1986
Towson, Maryland

The Medical and Chirurgical Faculty of the State of Maryland

Exhibit A

Balance Sheet

Assets	General Fund	Endowment and Special Funds	Plant Fund	Med-Chi Insurance Fund	Total December 31, 1985	Total December 31, 1984
Current						
Cash	$3,138,005	$ 343,537	$ 103,433	$1,183,852	$ 4,768,827	$5,415,034
Accounts Receivable						
Membership dues, journal and advertising	110,163	—	—	—	110,163	56,280
Other funds	176,875	395,534	—	—	572,409	234,143
Other	184,022	—	—	15,000	199,022	69,392
The Med-Chi Agency, Inc.	9,734	—	—	—	9,734	146,479
Loans receivable—plant fund	36,842	—	—	—	36,842	36,842
Prepaid expenses	8,743	—	—	—	8,743	6,497
	3,664,384	739,071	103,433	1,198,852	5,705,740	5,964,667
Marketable securities	—	1,553,474	—	—	1,553,474	1,420,232
Investment—The Med-Chi Agency, Inc.	274,348	—	—	—	274,348	224,632
Fixed						
Land, buildings and improvements	—	—	1,570,224	—	1,570,224	721,448
Other	94,567	—	373,719	—	468,286	487,387
Other assets	895,907	173,562	—	—	1,069,469	—
	$4,929,206	$2,466,107	$2,047,376	$1,198,852	$10,641,541	$8,818,366
Liabilities and Fund Balances						
Current						
Accounts Payable						
Trade	$ 23,734	$ —	$ —	$ 457,327	$ 481,061	$ 230,031
Other funds	355,552	90,762	66,591	59,504	572,409	243,143
The Med-Chi Agency, Inc.	—	—	—	50,041	50,041	61,035
Component societies	731,565	—	—	—	731,565	568,851
Payroll taxes	4,323	—	—	—	4,323	12,632
Accrued expenses	52,114	—	—	—	52,114	54,724
Grants payable	77,508	—	—	—	77,508	77,508
Deferred income	891,657	—	—	—	891,657	659,883
Deferred compensation	—	349,571	—	—	349,571	331,643
Loans payable—general fund	—	—	36,842	—	36,842	36,842
	2,136,453	440,333	103,433	566,872	3,247,091	2,267,292
Fund Balances						
Invested in fixed assets	—	—	1,943,943	—	1,943,943	1,095,167
Designated						
Legal fund	92,245	—	—	—	92,245	92,245
Educational purpose	53,151	—	—	—	53,151	27,426
Other	5,493	—	—	—	5,493	(970)
Undesignated	2,641,864	2,025,774	—	631,980	5,299,618	5,337,206
	2,792,753	2,025,774	—	631,980	7,394,450	6,551,074
	$4,929,206	$2,466,107	$2,047,376	$1,198,852	$10,641,541	$8,818,366

The accompanying notes to financial statements are an integral part of this statement.

Exhibit B

Statement of Income Expenditures, and Transfers
General Fund (undesignated)

	For Years Ended December 31, 1985	December 31, 1984
Income		
Dues	$1,156,192	$1,146,683
Rents and services	12,852	10,046
Meetings	188,295	58,440
Journal advertising and subscriptions	173,551	124,318
Interest	193,127	272,370
Miscellaneous	153,816	118,479
Equity interest in the Med-Chi Agency, Inc.	149,716	98,818
	2,027,549	1,829,154
Expenditures		
Operating expenses	1,731,717	1,477,336
Excess of income over expenditures	295,832	351,818
Transfers—Endowment and Special Funds		
From consolidated fund income	4,066	6,750
From special funds	23,322	9,308
To plant fund	135,622	—
To special funds—deferred compensation	—	(21,608)
	163,010	(5,550)
Excess of income and transfers over expenditures	$ 458,842	$ 346,268

The accompanying notes to financial statements are an integral part of this statement.

Exhibit C

Statement of Income and Expenditures
Med-Chi Insurance Fund

	For Years Ended December 31, 1985	December 31, 1984
Income		
Administrative fees	$ 90,922	$ 46,792
Interest	158,076	221,738
	$ 248,998	$268,530
Expenditures		
Administrative services	26,400	24,771
Postage, printing and supplies	727	697
Rent	1,050	1,044
Telephone	500	480
Professional fees	990	990
Contributions	500,000	20,000
	529,667	47,982
Excess (Deficit) of income over expenditures	$(280,669)	$220,548

The accompanying notes to financial statements are an integral part of this statement.

Notes to Financial Statements
December 31, 1985

Note 1—Summary of Significant Accounting Policies

The Medical and Chirurgical Faculty of the State of Maryland is a nonprofit organization, tax exempt under Section 501 of the Internal Revenue Code.

Marketable securities are carried at cost. Market values at December 31, 1985 and 1984 were $1,995,207 and $1,679,940, respectively.

The Faculty carries its investment in the 100% owned The Med-Chi Agency, Inc. at equity. The net assets of the corporation as of December 31, 1985 and 1984 were as follows:

	1985	1984
Current assets	$429,613	$446,928
Fixed assets—net	7,456	5,686
	437,069	452,614
Current liabilities	162,721	227,982
	$274,348	$224,632

Fixed assets of the plant fund, other than personal property, are recorded at cost. Portraits were appraised as of December 31, 1963 at $65,000, an increase of $51,000 over prior years. All other personal property was appraised as of December 31, 1949. Depreciation on fixed assets is not provided. A schedule of fixed assets follows:

	1985	1984
Real Estate		
1209–1215 Cathedral street		
Land and building	$ 110,636	$ 110,636
Improvements	347,014	347,014
1205–1207 Cathedral Street and 1204 Maryland Avenue		
Land and buildings	949,639	100,862
Improvements	162,936	162,936
	1,570,225	721,448
Other		
Library books, journals	231,370	231,370
Office and library–fixtures, antiques and museum pieces	77,349	77,349
Portraits—appraised value	65,000	65,000
	373,719	373,719
	$1,943,944	$1,095,167

Fixed assets of the general fund are recorded at cost and depreciated using the straight-line method over their estimated useful lives for assets acquired prior to 1981 and using the accelerated cost recovery system for assets acquired after 1980.

	December 31, 1985	December 31, 1984	Life in Years
Auto equipment	$ 9,796	$ 9,796	4
Office equipment	251,998	236,815	5–10
Total cost	261,794	246,611	
Less—accumulated depreciation	167,227	132,943	
	$ 94,567	$113,668	

Provision for depreciation charged to operations for the years ended December 31, 1985 and 1984 was $34,284 and $45,931, respectively.

Note 2—Pension Plan

The Faculty has a noncontributory pension plan covering substantially all its employees. Pension contributions for the current year and prior year were $52,114 and $54,724, respectively, which includes amortization of prior service cost over 20 years. The Faculty's policy is to fund pension costs accrued. Actuarial determined pension costs are funded on an annual basis by the Frozen Initial Liability method with initial accrued liabilities computed under the Entry Age Normal Cost method. A comparison of accumulated plan benefits and plan net assets for the Faculty is presented below:

	1985	1984
Actuarial Present Value of Accumulated Plan Benefits		
Vested	$ 835,752	$726,453
Nonvested	96,948	92,359
	$932,700	$818,812
Net assets available for benefits	$1,134,170	$924,731

The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 6.5% for both 1985 and 1984. The fund's assets as of April 1, 1985 and April 1, 1984 exceeded the vested benefits by $298,418 and $198,278, respectively.

Statement of Changes in Fund Balances for Year Ended December 31, 1985

	Balance January 1, 1985	Additions: Excess of Income over Expenditures and Transfers	Additions: Investment Income	Additions: Interest on Savings Accounts	Additions: Plant Fund Assessments of Members	Additions: Other Income and Contributions Received	Additions: Gain on Sale of Securities	Deductions: Transfers In (Out)	Deductions: Expenditures	Balance December 31, 1985
General Fund										
Designated	$ 118,701	$ —	$ —	$ —	$ —	$ 32,188	$ —	$ —	$ —	$ 150,889
Undesignated	2,183,022	458,842	—	—	—	—	—	—	—	2,641,864
Endowment and Special Funds	1,832,307	—	137,184	25,964	—	32,003	113,693	(4,066)	111,311	2,025,774
Plant Fund	1,504,395	—	—	20,008	—	555,162	—	(135,622)	—	1,943,943
Med-Chi Insurance Fund	912,649	(280,669)	—	—	—	—	—	—	—	631,980
	$6,551,074	$178,173	$137,184	$45,972	$ —	$619,353	$113,693	$(139,688)	$111,311	$7,394,450

For Year Ended December 31, 1984

	Balance January 1, 1984	Additions: Excess of Income Over Expenditures and Transfers	Additions: Investment Income	Additions: Interest on Savings Accounts	Additions: Plant Fund Assessments of Members	Additions: Other Income and Contributions Received	Additions: Gain on Sale of Securities	Deductions: Transfers In (Out)	Deductions: Expenditures	Balance December 31, 1984
General Fund										
Designated	$ 130,801	$ —	$ —	$ —	$ —	$32,608	$ —	$ —	$ 44,708	$ 118,701
Undesignated	1,836,754	346,268	—	—	—	—	—	—	—	2,183,022
Endowment and Special Funds	1,668,773	—	108,293	19,666	—	250	86,927	(6,750)	44,852	1,832,307
Plant Fund	1,418.677	—	—	59,406	25,540	772	—	—	—	1,504,395
Med-Chi Insurance Fund	692,101	220,548	—	—	—	—	—	—	—	912,649
	$5,747,106	$566,816	$108,293	$79,072	$25,540	$ 33,630	$ 86,927	$ (6,750)	$ 89,560	$6,551,074

The accompanying notes to financial statements are an integral part of this statement.

Note 3—Related Parties

The Medical and Chirurgical Faculty of the State of Maryland owns the stock of the Med-Chi Agency, Inc. The Faculty leases office space to the Agency under a month-to-month lease. Lease payments from the Agency were $9,396 for 1985 and 1984. Additionally, the Faculty performed certain management and accounting services for the Agency; income for these services was $56,000 in 1985 and 1984.

Note 4—Contingency

The Faculty has entered into a deferred compensation agreement with the Executive Director of the Faculty. The agreement provides for compensation to be accumulated in a reserve account and paid upon the termination of employment, conversion from full to part-time employee status, or partial or total incapacitation. Deferred compensation at December 31, 1985 and December 31, 1984 amounted to $349,571 and $331,643 respectively.

Note 5—Other Assets

The Faculty has deposits in several savings and loan associations under control of the Maryland Deposit Insurance Fund (MDIF). Availability and disbursement of funds is controlled by the state agency and the funds are not considered current for this fiscal period.

Proposed Budget 1986: Estimated Income

	Budget 1985	Projected Actual Thru Dec. 1985	Budget 1986
Membership Dues	$1,160,000	$1,161,000	$1,165,000
Investment Income	196,000	300,000	310,000
Medical Journal	120,000	178,000	185,000
Annual & Semiannual Meetings	60,000	24,000	25,000
Administrative Services	80,000	90,000	100,000
Other Income	30,000	30,000	35,000
Total	$1,646,000	$1,783,000	$1,820,000

Estimated Expenditures

	Budget 1985	Projected Actual Thru Dec. 1985	Budget 1986	
Auditing	$6,900.00	$7,200.00	$7,200.00	
Legal	5,000.00	—	5,000.00	
Contributions	1,000.00	600.00	1,000.00	*A
Gas, Electricity, Water	28,000.00	22,082.21	25,000.00	
Telephone & Telegraph	30,000.00	28,326.26	30,000.00	
Postage	44,000.00	50,000.00	55,000.00	
Household & Janitorial	10,000.00	8,932.80	10,000.00	
Property Maintenance	15,000.00	7,387.05	10,000.00	
Insurance	14,000.00	12,500.00	14,000.00	
Special Equipment Services	2,000.00	2,000.00	2,000.00	
New Equipment	15,000.00	12,971.28	15,000.00	
Equipment Maintenance	2,000.00	1,000.00	2,000.00	
Stationery & Supplies	15,000.00	17,520.57	18,000.00	
Salaries	782,000.00	781,000.00	852,000.00	
Social Security	52,000.00	52,799.51	58,000.00	
Unemployment Compensation	8,000.00	8,000.00	10,000.00	
Employees' Insurance Program	55,000.00	54,660.46	58,000.00	
Employees' Pension	66,000.00	66,000.00	70,000.00	
Supplementary Hours	4,000.00	5,000.00	6,000.00	
Travel	85,000.00	70,000.00	85,000.00	*B
Printing	25,000.00	23,605.62	27,000.00	*C
Data Processing	15,000.00	16,027.87	18,000.00	
Governmental Relations	25,000.00	25,536.55	65,000.00	*D
Library	20,000.00	20,000.00	20,000.00	*E
Journal Expense	135,000.00	170,974.90	185,000.00	
Annual & Semiannual Meetings	100,000.00	67,461.20	70,000.00	*F
Presidential Fund	10,000.00	10,000.00	10,000.00	
Auxiliary	1,000.00	1,000.00	1,000.00	
Miscellaneous Expense	25,000.00	26,915.08	30,000.00	
Depreciation	40,000.00	45,000.00	48,000.00	
Total	$1,635,900.00	$1,614,501.36	$1,807,200.00	

A. Contributions: Reflects a reserve for possible requests during the year.

B. Travel: Includes attendance at following meetings:
Professional Convention Management Association, 1st week in January 1986 (two staff members).
Regional Legislative Conference, January (three staff members.)
National Medical Leadership Conference, Chicago; President President-elect, Council Chairman, two staff members, February 20–22.
Six Delegates, Six Alternates, President, President-elect, and staff to attend:
1. AMA Annual Meeting, Chicago—June
2. AMA Interim Meeting—Las Vegas—December

Medical Society Executive Conference, in conjunction with above (three staff members).
American Society of Association Executives, Annual Meeting or similar education activity.
AAMSE (American Association of Medical Society Executives) (two staff members).
Travel throughout the state for various component society meetings, other business and activities, as well as out of state regional and national sessions as determined on an individual basis.

C. Printing: Includes the publication cost of the membership directory.

D. Governmental Relations: Includes nurses' salaries and supplies for First Aid Room, legislative representation, publications printing and mailing costs, and travel.

E. Library: Includes Memberships, Travel, Supplies, Equipment, Xeroxing, Postage and Miscellaneous Library expenditures. Library salaries are in the salary account. Journal subscriptions, books, binding, etc. are purchased by designated funds and are not included in this item.

F. Annual & Semiannual Meeting Expenses: New expenditure items of over $5,000 for these meetings (exclusive of pass-through items) to be approved by Executive Committee or Council. Arrangements and costs for Presidential Banquet and other social events, to be cleared by Executive Committee.

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diltiazem HCl/Marion

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- ***A safe choice for angina patients with coexisting hypertension, asthma, COPD, or PVD*** [4,7]
- ***Proven efficacy when used alone in angina*** [3]
- ***Compatible with other antianginals*** [8,9*]

See Warnings and Precautions.

Please see brief summary of prescribing information on the next page.



CARDIZEM® FEWER SIDE EFFECTS IN ANTIANGINAL THERAPY

diltiazem HCl/Marion

60 mg tid or qid

Brief Summary
Professional Use Information
CARDIZEM®
(diltiazem HCl) 30 mg and 60 mg Tablets

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). An acute study of oral diltiazem in patients with impaired ventricular function (ejection fraction 24% ± 6%) showed improvement in indices of ventricular function without significant decrease in contractile function (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.
Nervous System:	Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.
Gastrointestinal:	Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.
Dermatologic:	Petechiae, pruritus, photosensitivity, urticaria.
Other:	Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. Issued 11/85

See complete Professional Use Information before prescribing.

References: 1. Frishman WH, Charlap S, Goldberger J, et al: Comparison of diltiazem and nifedipine for both angina pectoris and systemic hypertension. Am J Cardiol 1985;56:41H-46H. **2.** Weiner DA, McCabe CH, Cutler SS, et al: The efficacy and safety of high-dose verapamil and diltiazem in the long-term treatment of stable exertional angina. Clin Cardiol 1985;7:648-653. **3.** Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983;106(6):1341-1347. **4.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **5.** McCall D, Wolsh RA, Frohlich ED, et al: Calcium entry blocking drugs: Mechanisms of action, experimental studies and clinical uses. Curr Probl Cardiol 1985;10(8):6-80. **6.** Chaffman M, Brogden RN: Diltiazem: A review of its pharmacological properties and therapeutic efficacy. Drugs 1985;29:387-454. **7.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50 (Sept):94-116. **8.** Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159. **9.** Johnston DL, Lesoway R, Humen DP, et al: Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol 1985;55:680-687.

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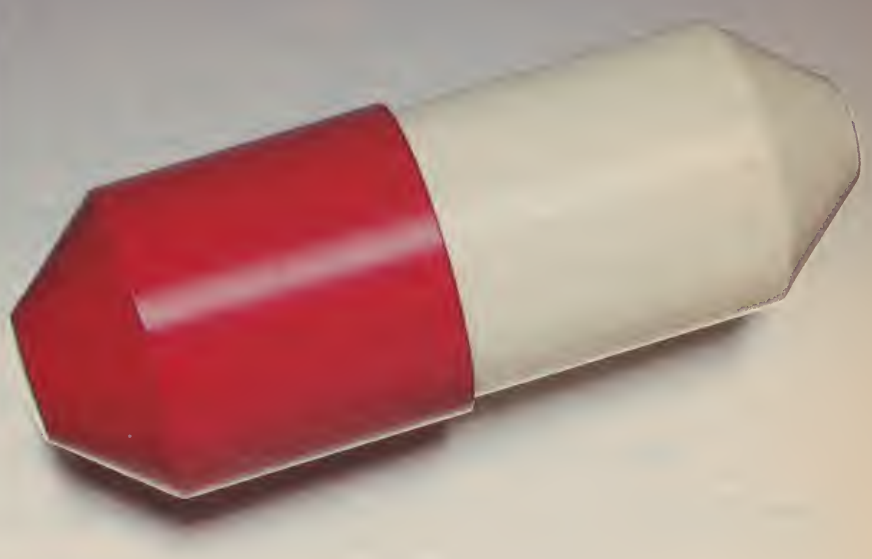
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* **WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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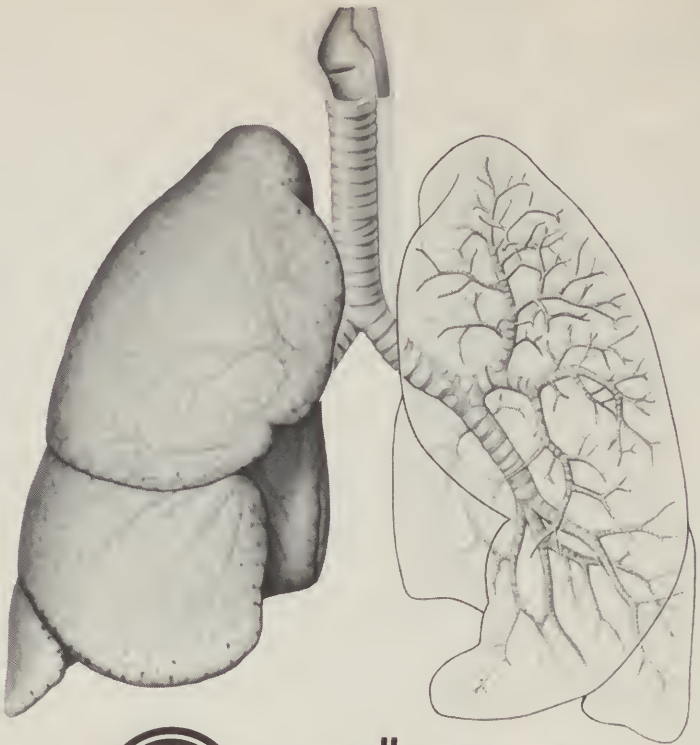
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Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor® (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
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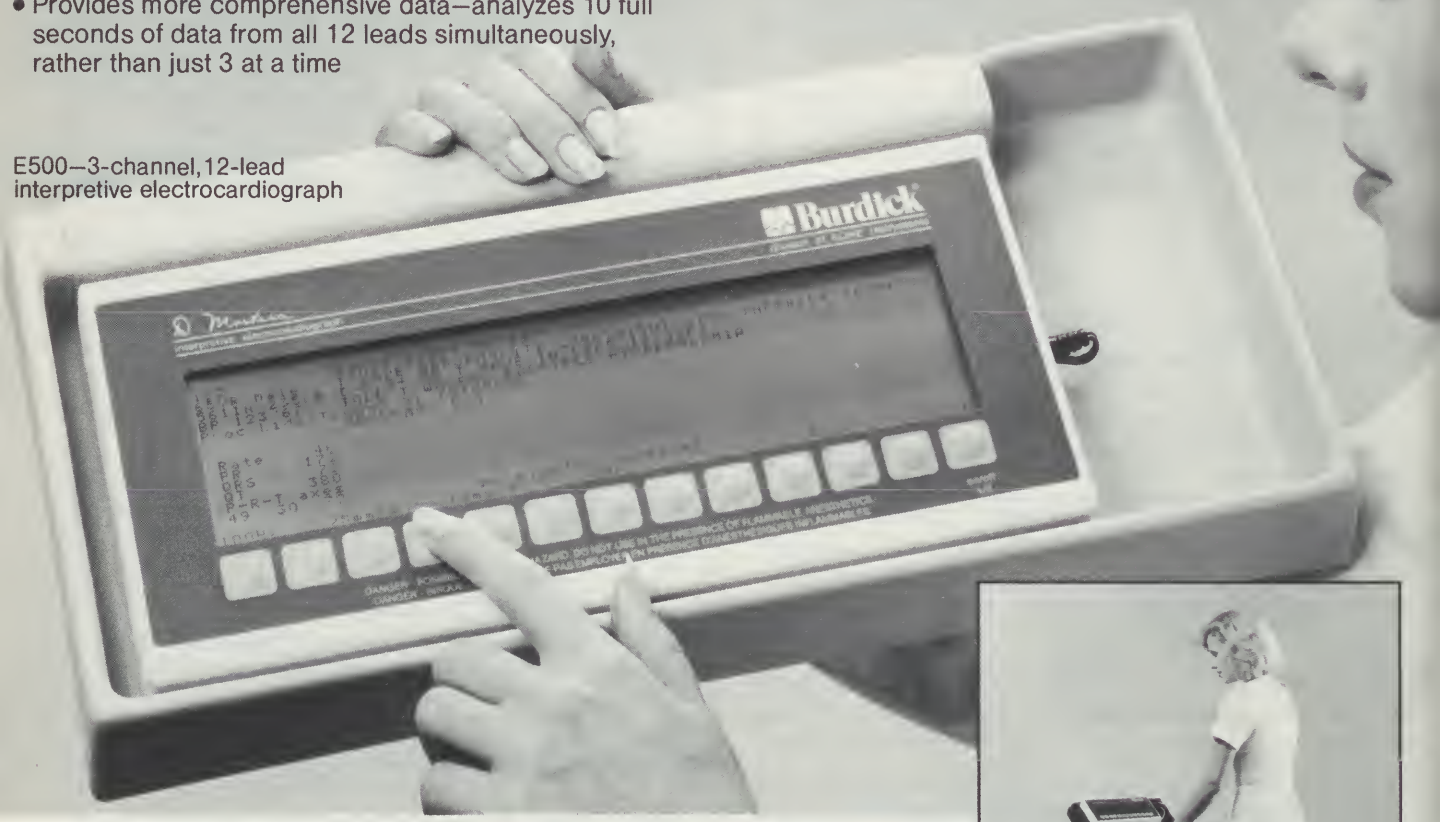
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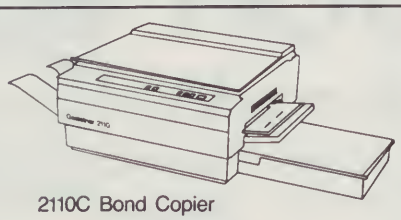
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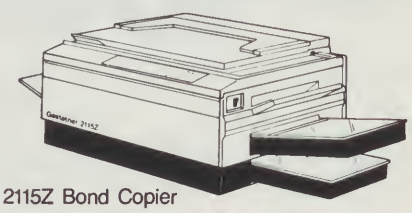
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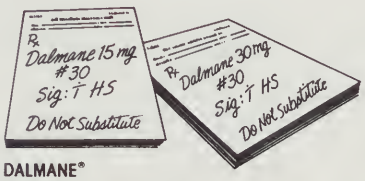
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Executive Committee and Council Actions

Executive Committee—May 22, 1986

• **Med-Sig Bulletin Board** Gerald Oster MD, Chairman of the Computers in Medicine Committee, stated his Committee has acquired a computer bulletin board program. All information posted will be screened and approved before it is released for general consumption.

• **AMA Masterfile** A request from the American Medical Association was approved to pilot test on-line access to the Physician Masterfile. The test can be conducted within the current budget and present equipment.

• **Blue Cross/Blue Shield Provider Letter** The Committee discussed the February 21 letter to providers requiring the use (beginning in July) of ICD-9 CM diagnosis codes for all claims. A letter of clarification has been received stating that diagnosis coding is requested rather than required. Claims without coding will be processed manually.

• **Blue Cross/Blue Shield Demonstration Project** Approval was given for the Faculty to explore increased communication with the insurance company by moving forward with an ad hoc committee formed for that purpose under the direction of Leon E. Kassel MD.

• **Physician Rehabilitation** Michael Hayes MD and Robert White were commended for their work with the Physician Rehabilitation Committee and for the progress made over the past year. The Executive Committee approved a conference, "Impairment Among Professionals," sponsored jointly by the Physician Rehabilitation Committee and the Health and Education Council. The Council will handle all promotion, mailing, planning, and financial risk for the conference, and the Physician Rehabilitation Committee will be in charge of program topics and faculty. Percentage of profit to the Faculty will be 5 to 8 percent. Dr. Hayes and Mr. White were asked to explore the possibility of an increased share of the profit for Med-Chi.

Dr. Hayes requested establishing a Financial Board of Directors for the Committee on Physician Rehabilitation because the committee has received a grant from the Medical Mutual Liability Insurance Society and one is expected from Blue Cross/Blue Shield. On the President's recommendation, the Executive Committee approved establishing a Subcommittee for Financial Affairs for the Physician Rehabilitation Committee. Joseph Harrison will be included on the subcommittee, and all funds accruing to the subcommittee will be considered Med-Chi funds.

• **MMLR** William H.M. Finney MD reported on activities of Marylanders for Malpractice Liability Reform. They intend to continue to work closely with Med-Chi and anticipate another year's existence. Dr. Finney informed the Committee of a larger organization to work on general liability issues. MMLR's initial meetings with insurance industry representatives, trucking companies, and others have explored such an organization. If it is created, MMLR would hope to participate in it as a member. Donald T. Lewers MD conveyed his intention to remove himself from the MMLR board and to name a replacement.

• **Department of Government Relations** Executive Committee approved establishment of a full-time department as directed by the planning session and developed by the President, the Legislative Chairman, and the Acting Executive Director. Individual budget items will be referred to Executive Committee as they arise.

• **Senior Citizen Coalition** After a presentation by Dr. Lewers, creation of a Task Force Coalition with Senior Citizens, to be appointed by the President, was approved. It was recommended that retired physicians be considered for membership in this group that will deal with problems of the elderly.

• **Actuarial Evaluation of Medical Mutual Rate Filing** The summary of information provided by the firm of Coopers and Lybrand was distributed. Faculty leadership will present testimony at the public hearing stressing the need to make the decision on absolutely sound actuarial data.

• **Hands Across America** Responding to an AMA request to support this effort, the Executive Committee approved a contribution of $750.

• **Nondues Income** The Executive Committee charged the Finance Committee with evaluating the information on nondues income and preparing a report for the Executive Committee.

• **Funding for Medical Education** Approval was given for formation of a task force to include Edward Brandt MD, representatives of medical schools, students, and residents to examine the long-term funding for medical education.

• **Nurse Practitioner Prescribing** An update was given of the Attorney General's opinion permitting the prescribing by nurse practitioners. The Executive Committee went on record as opposing the expansion of the definition of authorized prescribers beyond current language in Maryland law and asked that membership be notified.

• **AMA Residency Review Committee** Timothy R.B. Johnson MD was approved to become a member of this AMA Committee.

• **Maryland Foundation for Health Care** The Maryland organization is planning to bid on the Delaware PRO contract. Raymond M. Atkins MD reported that Pennsylvania, Virginia, and West Virginia are also submitting bids.

• **Executive Committee Meeting** Results of a poll of members of the Committee showed the present schedule continues to be acceptable.

• **Communications** Michael R. Dobridge MD presented his ideas on communications within the organization: membership needs to be better informed in order to combat apathy and passive participation. He urged Councilors to report to their home components.

• **Maryland Unique Physician Identifier Program** A proposal was approved to contract directly with the Commission on Medical Discipline to conduct the hospital notification function required by SB 560 from the 1986 legislature. Also approved was appointment of a small "oversight" committee to approve use of the physician identification mechanism.

• **Advisory Committee—Small Area Analysis** Appointment was approved of an advisory panel of practicing specialists throughout the state to provide analytical consultation to the DHMH on the small areas variation data. Information will be shared with Council at the next meeting.

• **General Accident Insurance Company** Faculty staff has been exploring the possibility of a class action suit against General Accident Insurance Company's withdrawal from the Maryland market. The request comes from several physicians harmed by the action. The Executive Committee approved a feasibility study with final recommendation as soon as possible.

• **Ad Hoc Task Force on Membership** Approval was given for this group to explore membership building opportunities, reporting to Council in the fall.

• **Michael Magan MD v. Medical Mutual** After discussion of the court decision in this case, Legal Counsel was given authority to explore and to recommend any definite legal action in this case. Meanwhile, the leadership was directed to meet with Medical Mutual to discuss communications with physicians, underwriting guidelines, and other items of mutual concern.

• **Specialty Society Representation on Council** Executive Committee approved drafting a proposal for presentation to council including the following elements: (1) Specialty society representation on the Council of Med-Chi, and (2) Criteria for consideration to include 60 percent or greater Med-Chi membership, overall membership in the specialty society of at least 50 physicians, statewide specialties that are branches of national medical specialty organizations only, and one representative from each society.

• **New Business** The Committee was briefed about HB 1813, Verification of Death, and will report the results of the committee work at a later meeting.

Executive Committee—June 16, 1986

• **Conflict of Interest** Judith Wood, Legal Counsel, discussed a recent situation in which an attorney from Anderson, Coe, and King, representing a physician in a malpractice action, also represented the same physician before the Commission on Medical Discipline. Since this firm also represents the Faculty, there could be the appearance of a conflict of interest in such a situation. The Committee requested a policy statement be drawn up and returned to the Committee for review.

• **Meetings of the Faculty** Following discussion of Faculty meetings and the distribution of minutes, Legal Counsel was directed to prepare a policy statement that meetings of the Executive Committee, Council, and House of Delegates are open to all members of the Faculty. Minutes thereof are to be available to all persons who are Faculty members at the time of the meeting.

• **Location of Future Meetings of Council** The Committee reviewed a proposal for moving Council meetings to different locations throughout Maryland. Cost estimates for the meetings included staff mileage and meals for those in attendance. The Executive Committee sent the proposal without recommendation to Council for consideration.

• **Health Policy Agenda** AMA has requested participation by the federation in funding the administrative and implementation costs of the publication of the "Health Policy Agenda for the American People." Based on the recommended guidelines for HPA contributions, the Committee approved a contribution of $2,000 to be paid by January 1987.

• **National Organization for Women** After discussion of a request from NOW to cosponsor a conference, "Reproductive Freedom—Myth and Reality," the Committee declined to lend the name of the Faculty or to contribute financially to any organization that could polarize membership.

• **Medical Payment System** The Medical Payment System, a billing mechanism for physicians endorsed by the AMA and available for sponsorship by state and county medical societies, was discussed. Those joining in sponsorship will receive a portion of each billing as nondues income. Society endorsement does not bind any physician in the program, nor does it preclude nonmembers from subscribing. AMA nonmembers would pay a higher fee for the service than members. The Committee voted approval for Med-Chi to sign a contract with Medical Payment System.

• **Semiannual Meeting 1987** The Committee on Scientific Activity requested changing the 1987 Semiannual meeting scheduled for September in Hawaii to January and February 1988. After discussion, the Committee voted to send the item to Council without recommendation.

• **Physician Charitable Contributions** A request for approval from J. Andrew Sumner MD for a questionnaire to be mailed to physicians (in some regular Faculty publication) to determine the amount of physician interest in making charitable contributions was endorsed and forwarded to Council.

• **Court Cases** Ms. Wood reported that the case brought by Dr. Radvan against physicians participating in the peer review process was dismissed by the court. Ms. Wood also reported that John King, Esq. asked Med-Chi to file a brief as *amicus curiae* in the Hetrick case which, in effect, changes the burden of proof for a defendant physician in a medical malpractice action. Approval was granted, and a brief will be filed at the appropriate time.

Council—June 26, 1986

After members of the Executive Committee and staff introduced themselves, Chairman Michael R. Dobridge MD asked for opening remarks from Donald T. Lewers MD, President, and Leon E. Kassel MD, President-Elect.

Dr. Lewers stressed that the Faculty is working closely with Medical Mutual to resolve some of the many problems that have arisen in the tight insurance market. Dr. Kassel urged physicians to cooperate to find solutions to the myriad issues confronting the profession. Dr. Dobridge asked Council members to communicate fully with their component medical societies on the business transacted at the meetings. He hopes to stimulate a dialogue among Council members, the Executive Committee, and the general membership and encouraged all present to come forth with comments and questions.

• **Adoption of Minutes** The following minutes were adopted as amended:

Executive Committee, April 10, 1985
Council, April 16, 1986 (amended to indicate Andrew Fridberg MD being present)
Council, April 18, 1986
Executive Committee, May 22, 1986
House of Delegates, April 16, 1986 (amended to indicate Charles M. Caravati, Jr., MD as President, Medical Society of Virginia)
House of Delegates, April 18, 1986

• **Semiannual Meeting 1987** J. Courtland Robinson MD, Chairman of the Committee on Scientific Activity, and John Krager MD, Chairman 1987 Semiannual Meeting, were present to discuss changing the date of the 1987 Semiannual Meeting scheduled for September in Hawaii to January or February 1988. Council requested information on weather in Hawaii for the proposed dates, availability of Ocean City sites in the future, and number of people interested in the date change. The item was returned to the Committee of Scientific Activity for additional information.

• **Government Relations Department** Council approved the description of the new Department of Government Relations as forwarded by the Executive Committee. John Stierhoff, hired to head the new department, was introduced.

• **Physician Charitable Contributions** J. Andrew Sumner MD explained a questionnaire (to be distributed with some regularly scheduled Faculty mailing) designed to ascertain the level of charitable giving by physicians. Approved by the Executive Committee, the mailing was approved by Council after a few additional questions.

• **Specialty Society Representation on Council** Dr. Lewers presented the proposal to expand the Council to include representatives from Maryland chapters of national medical specialty organizations. Discussion centered on the total number of new Councilors this would provide, the percentage of Med-Chi members a specialty society would need in order to qualify, and the possibility of having specialty society members in the House of Delegates but not on Council. The matter was returned to the Executive Committee for further research and for report at the next Council meeting.

• **Location of Future Council Meetings** Members examined and discussed the proposal for moving future Council meetings to different locations in the state for at least one meeting a year. The consensus was that Council meetings should not be moved from Med-Chi.

• **Status of Recommended Actions from Planning Retreat** Action on high priority issues identified by retreat participants was distributed to Council.

• **Commission on Medical Discipline** Names of physicians submitted by their component societies for appointment to the Commission on Medical Discipline are:

Hilary T. O'Herlihy MD, Internal Medicine, Anne Arundel County
Anthony H. Woodward MD, Orthopedic Surgery, Carroll County
Gerald J. Schipper MD, Dermatology, Frederick County
George H. Henning MD, Family Practice, Wicomico County
Paul A. Scott MD, General Practice, Worcester County
Federico G. Arthes MD, General Preventive Medicine, Worcester County
Karl H. Weaver MD, Pediatrics, Baltimore City
Jason Geiger MD, Internal Medicine, Montgomery County

The name of Merton L. White MD, currently serving, was withdrawn by Montgomery County Medical Society at Dr. White's request. Following the reading of the list of nominees, several Councilors spoke on behalf of some of those nominated. Council Chairman named Reynaldo Lee-Llacer MD and Marvin Schneider MD as tellers, and an election took place with the following results:

Hilary T. O'Herlihy MD—34 votes
Karl H. Weaver—24 votes
Jason Geiger MD—18 votes
Gerald J. Schipper MD—3 Votes

The names of Dr. O'Herlihy and Dr. Weaver will be submitted to the Commission.

• **AMA-ERF Award for Health Education** Council approved Joseph F. Chambers as a candidate for the AMA-ERF award. He was nominated by the Montgomery County Medical Society.

• **Small Area Analysis** Dr. Kassel brought Council up to date on the progress of ongoing analysis of data being collected by DHMH on frequency of certain procedures performed throughout Maryland.

• **Dues Waiver** The following physicians were ap-

proved for dues waivers for 1986 at the request of the component society indicated:

Montgomery County Medical Society	Lloyd E. Church DDS, Bethesda (aff. member) (Financial hardship)
	William J. Hogan MD, Rockville (illness)
	Dorothy M. Cothran MD, Rockville (financial hardship)
	John D. Griswold MD, Washington, DC (aff. member) (financial hardship)
Allegany County Medical Society	Calvin Y. Hadidian MD, Cumberland (medical disability)
Prince George's County Medical Society	Harvey L.P. Resnik MD, College Park (sabbatical)
	Cefie De La Paz, MD Lanham (financial hardship)

• **Emeritus Membership** The following members were approved for recommendation to the House of Delegates for Emeritus Membership:

Baltimore County Medical Association	Mutlu Urcun Atagun MD, Baltimore (retired)
	Salvador Rossello MD, Baltimore (retired)
	Harry D. Shernan MD, Baltimore (retired)
	John F. Ullsperger MD, Towson (retired)
Montgomery County Medical Society	Frederick Y. Donn MD, Washington, DC (retired)
Prince George's County Medical Society	Orhan H. Aydinel MD, Oxon Hill (retired)
Talbot County Medical Society	Justin T. Callahan MD, Easton (retired)
	Octavus P. Large MD, Easton (retired)

• **CHAMPUS** Members of the Southeastern Coalition to the AMA asked for participation of its members in the exploration of a bid for the capitation contract being sought by CHAMPUS. Council approved Faculty participation with expenses paid for two people to attend the meeting. Albert M. Antlitz MD reported that the members of the AMA delegation approved participation and thanked Council for its approval.

• **Auxiliary Report** Mrs. Nancy Howell, Auxiliary President, outlined her year's agenda focusing on the medical family. She said two major priorities will be membership and legislation; she hopes her members will work closely with Faculty members in these two areas.

• **Executive Search Committee** George S. Malouf MD reported 24 applications have been received to date, and all the advertisements for the job have been published.

• **AMA Annual Meeting** Dr. Antlitz reported that John Coury MD, Michigan, is AMA's new president; William S. Hotchkiss MD, Virginia, is president-elect. He spoke about the CHAMPUS capitation plan (already discussed), two reports, the refinancing of Medicare and the quality of care issues, both of which are available through the Faculty.

He outlined the new section of the AMA created at the Annual Meeting for Young Physicians: those under 40 years old or less than five years in practice. This item will come before Council for consideration at a later date.

• **Committee on Professional Ethics** Council approved the statement on *Patient Transfers* and *Free Choice of Physician and Patient*. The following editorial change was suggested for the latter statement: In the appropriate situation, the referring physician has a duty to refer the patient to qualified specialists (underlined portion added).

Council endorsed the *AMA Statement on Withholding Treatment* and directed the Legislative Committee to begin an initiative to delete from the Living Will Law the prohibition against the stopping of food and water.

• **Commendation: Israel Weiner MD** Dr. Dobridge read a letter from the Legislative Committee commending Israel Weiner MD for his outstanding assistance to the Committee this year.

• **New Business** Council approved a motion from Dr. Lewers:

> That the Faculty correspond with the appropriate bodies to offer our expertise and assistance on any war on drugs education program being organized by the University of Maryland in the aftermath of the death of basketball player, Len Bias.

Kennard L. Yaffe MD mentioned to Council recent advertisements by the Free State Health Plan and labeled them false and misleading in two areas: save $100 on your doctor bills and unlimited consultation. Leadership agreed to pursue the issue with officials from Blue Cross/Blue Shield.

Members assembled to honor Constance Townsend on the occasion of her retirement after 22 years with the Faculty. Members of Council and committee chairmen who had worked with Mrs. Townsend remembered their association with her.

We invite your comments as well as scientific articles. Write
Letters to the Editor* and *Commentary
***MMJ*, 1211 Cathedral St, Baltimore, MD 21201**

Commission on Medical Discipline

Delegation of Physical Therapy Duties to Unauthorized Persons*

Complaints continue to be received by the Commission on Medical Discipline and the Board of Medical Examiners concerning physicians delegating to unauthorized persons duties that fall within the scope of physical therapy. This practice is a violation of the Medical Practice Act, Section 14-304 and the Physical Therapy Practice Act, Section 13-401(a). The latter provides that only a licensed physical therapist may practice physical therapy.

A formal attorney general's opinion, dated July 25, 1977, states that one who engages in physical therapy as that term is defined in Section 604 [present Section 101 (i)] without being licensed by the Board is acting in violation of Maryland Law:

> Accordingly, we would conclude that a person not licensed as a physical therapist or otherwise authorized by law to undertake a modality which falls within the definition of the practice of physical therapy who charges a patient or receives compensation for performing services which fall within the Section 604 [present Section 101 (i)] definition would be engaged in the illegal practice of physical therapy and may be subject to the criminal penalities set forth in Section 613 [present 13-401(a) and 13-407].

In addition, the opinion states that "a person who charges a patient or third party payor for physical therapy services performed by an individual whom the person responsible for the billing knew or should have known was not a licensed physical therapist and not authorized to practice physical therapy, could reasonably be charged with aiding and abetting the illegal practice of physical therapy. In addition, it would seem that this person could also be charged with the crime of false pretenses since he is billing for physical therapy when the procedure performed was not done by one authorized by law to engage in the rendering of such a service."

Complaints to the Commission indicate that some physicians believe that they may delegate physical therapy duties to office staff. This clearly is not permitted.

* This is published for the edification of all concerned and with the hope of reducing complaints to the Commission on Medical Discipline.

Editor's Note: Under Maryland law, physicians may practice physical therapy as a part of the practice of medicine.

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Discipline Commission Action

In the Matter of Stanley Radvan-Ziemnowicz MD Before the Commission on Medical Discipline

Findings of Fact, Conclusions of Law and Order

Based on certain information coming to the attention of the Commission on Medical Discipline (the "Commission"), the Commission determined to charge Stanley Radvan-Ziemnowicz MD (the "Respondent") with violation of the probation provisions of the Order of the Commission dated January 3, 1984.

Findings of Fact

Based on evidence produced at the hearing, the Commission finds:

1. That on October 25, 1979, the Commission passed an order revoking the Respondent's license to practice medicine.
2. That on January 5, 1984, the Commission passed an order staying the revocation, and placing Respondent on probation subject to the following conditions:
   a. That Respondent shall submit to quarterly practice reviews by a Peer Review Committee designated by the Commission;
   b. That Respondent shall make arrangements for the Peer Review Committee to submit quarterly reports of its observations and evaluations of Respondent's medical practice to the Commission;
   c. The Respondent shall practice medicine competently and in accordance with the provisions of the Medical Practice Act, Health Occupations Article, §14-104 *et seq.* of the Annotated Code of Maryland.
3. That since January 5, 1984, Respondent was a physician licensed to practice medicine in the State of Maryland.
4. That on August 2, 1984, the Commission received a complaint regarding Respondent's treatment of patient A.
5. That on October 11, 1984, Walter J. Alt MD, Chairman of the Peer Review Committee reported to the Commission that the Peer Review Committee had been unable to conduct an adequate review of Respondent's practice because of the incomplete or inadequate records submitted to the Peer Review Committee by the Respondent. At first, the Respondent declined to submit records. Subsequently, the Respondent submitted only inadequate summaries of records, and finally the Respondent submitted inadequate records.
6. Based on the testimony of Walter J. Alt MD and Respondent, the records submitted to the Peer Review Committee by Respondent are the complete records of all of the patients of the Respondent.

On instruction of the Council of the Medical and Chirurgical Faculty of the State of Maryland, "Findings of Fact, Conclusions of Law, and Order" will be published in the Maryland Medical Journal.

7. That the records submitted to Respondent are incomplete and insufficient to the extent that they sustain the charge that Respondent is professionally incompetent because the records did not contain adequate history, physical examination, diagnosis, documented laboratory investigation, and treatment plan.

8. Adequate records are necessary to follow the health of patients and to provide continuity of care should another physician need to assume responsibility for treatment of the patient.

9. That there is no competent evidence to support the charge contained in the letter to the Commission dated August 2, 1984.

Conclusions of Law

Based on the foregoing Findings of Fact, the Commission finds that the Respondent violated the Order of the Commission dated January 5, 1984, that he is professionally incompetent in that he failed to keep adequate records, and that he has violated Section 14-504(4) of the Health Occupations Article of the Annotated Code of Maryland.

Order

Based on the foregoing Findings of Fact and Conclusions of Law, it is this 29th day of April 1986, by a majority vote of those members of the Commission hearing this case, hereby

ORDERED that the study of the revocation of the license of the Respondent, Stanley Radvan-Ziemnowicz MD, to practice medicine be WITHDRAWN, and that Respondent's license to practice medicine is REVOKED.

ORDERED that a copy of this Order be filed with the Board of Medical Examiners in accordance with Section 14-507 of the Health Occupations Article of the Annotated Code of Maryland, and it is further

ORDERED that this is a final order and as such is considered a public document pursuant to State Government Article of the Annotated Code of Maryland, Section 10-611, *et seq.*

HILARY T. O'HERLIHY **MD, Chairman**
Commission on Medical Discipline

• • •

In the Matter of Julian Sellek MD Before the Commission on Medical Discipline

Findings of Fact, Conclusions of Law and Order

Based on certain information coming to the attention of the Commission on Medical Discipline (the "Commission"), the Commission determined to charge Julian Sellek MD (the "Respondent") with violation of Section 14-504(3) of the Medical Practice Act, Health Occupations Article, Annotated Code of Maryland.

Findings of Fact

Based on the evidence produced at the hearing, the Commission finds that:

1. At all times relevant to this case, Respondent was a physician licensed to practice medicine in the State of Maryland;

2. On July 25, 1981 and September 29, 1981, the Respondent initiated unpermitted physical contact with female patients, having no relationship to their proper diagnosis or treatment;

3. That these acts constitute immoral conduct in the practice of medicine in that they are inappropriate and provocative behavior.

Conclusions of Law

Based on the foregoing Findings of Fact, the Commission finds that the Respondent violated Section 14-504(3) of the Medical Practice Act.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law, it is this 12th day of May 1986, by a majority vote of those members of the Commission hearing this case, hereby

ORDERED that the Respondent Julian Sellek MD, be REPRIMANDED.

HILARY T. O'HERLIHY **MD, Chairman**
Commission on Medical Discipline

Future Med-Chi Meetings

1987 Annual
April 29, 30, May 1
Omni International-Baltimore

1987 Semiannual
Mid-September
Maui, Hawaii

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Information for Authors

Med-Chi members reading papers before organizations, are invited to submit their papers to the MMJ for consideration for publications.

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Manuscripts may be sent to Editor *MMJ*, 1211 Cathedral St., Baltimore, MD 21201. Articles are accepted for publication on the condition that they are contributed solely to this journal. Transmittal letters should designate one author as correspondent and include his/her address and telephone number. Manuscripts are reviewed by the editor, editorial board members, and guest reviewers. The final decision is reserved for the Editor.

Specifications

Manuscripts must be original typed copy, double-spaced throughout (including text, case reports, legends, tables, and references) with margins of at least one inch. Number pages consecutively. Please submit two additional copies.

Include in the manuscript the concise title, full name of the author (or authors) with highest degree, academic and professional titles, affiliations, and any institutional or other credits.

An introductory synopsis/abstract of approximately 100–150 words is required.

Tables are to be typed on separate sheets of paper, numbered, and have a brief descriptive title. The Editor reserves the right to edit tables. Be sure that statistics are consistent in both tables and text.

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Illustrations are material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper. *Omit illustrations that do not increase understanding of text, and limit them to a reasonable number.* Four or fewer illustrations should be adequate for a manuscript of 4 to 5 typed pages. Legends are to be typed on a separate sheet of paper. Type on a gummed label and affix to the back of each illustration: figure number, title of manuscript, name of senior author, and arrow indicating top. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs and drawings. *Cost of printing color* photographs must be borne by the author.

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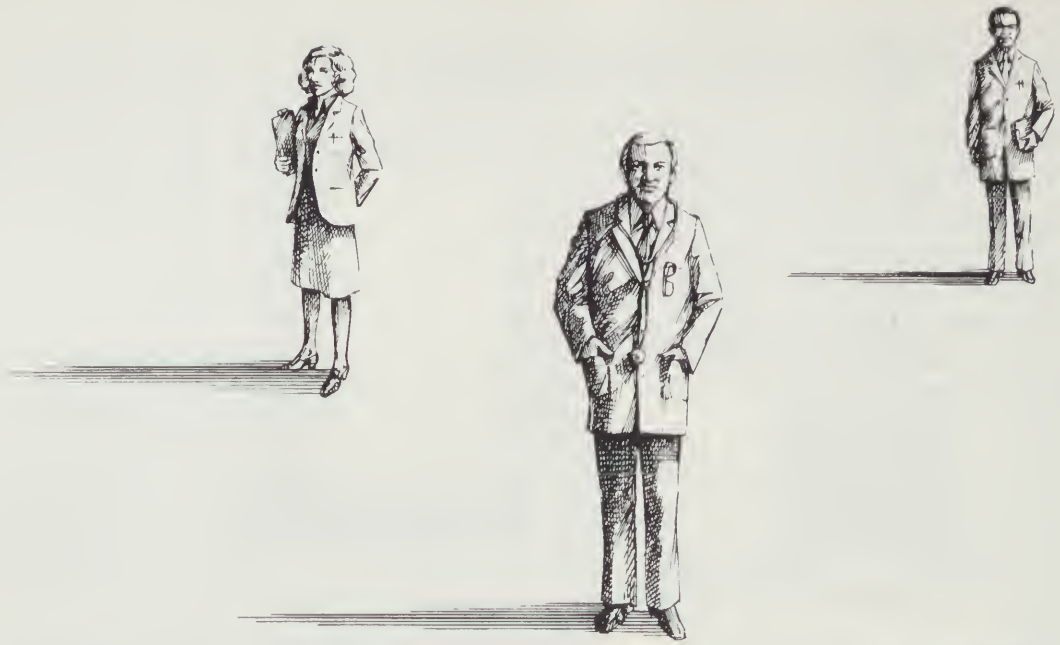
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Executive Director's Newsletter

September 1986

ANNAPOLIS LOOKS AT MALPRACTICE AGAIN!

At the urging of Lt. Governor J. Joseph Curran, Jr., the Governor has appointed an Oversight Committee on Liability Insurance to review recent legislative reforms and to develop administrative or legislative recommendations on the price and availability of insurance coverage in Maryland. In the Governor's letter to Committee members he noted that the 1986 initiatives, although significant, were "just a first step in our continuing efforts to ensure that affordable liability insurance coverage is available for all citizens."

Topics to be covered by the Committee will be activity and results in other states, issues still remaining to be considered in Maryland, and a set of recommendations to be presented to the next session of the Maryland General Assembly.

The members of the Task Force are: Lt. Governor J. Joseph Curran, Jr., Chairman; Edward J. Muhl; W. Minor Carter; Hon. Adele Wilzack; Robert C. Verderaime, Esq.; Hon. Thomas J. S. Waxter, Jr.; Israel H. Weiner, M.D.; Peter G. Angelos, Esq.; Hon. Robert B. Watts; and Hon. Thomas V. Mike Miller, Jr.

TAX CHANGES WILL AFFECT YOU

Med-Chi is planning to update its members on the new proposed tax legislation under consideration as of this date. These Seminars are planned for Wednesday and Thursday, November 19 and 20 in Washington, D.C. and the Baltimore metropolitan areas. Watch your mail in late September or early October for further information on these seminars.

HOUSE OF DELEGATES

Saturday, September 27, 1986 will be the Semiannual session of the House of Delegates. The meeting will take place in Osler Hall at 2 p.m. Among the items of business will be consideration of Bylaws changes, remarks from Carl Sardegna, President of Blue Cross and Blue Shield of Maryland and Raymond M. Yow, M.D., Chairman of the Board, Medical Mutual Liability Insurance Society; election of directors for Maryland Foundation for Health Care; election of member of Committee on Scientific Activity; review of previous resolutions; and introduction of the new Executive Director of the Faculty. The Symphony parking garage on the corner of Cathedral and Preston Streets will be open for parking.

BUILDING ASSESSMENT

Billing for the $100 assessment for the building fund was mailed in June. If you have not yet paid the bill, please mail your check to the Faculty office as soon as possible.

CHAMPUS

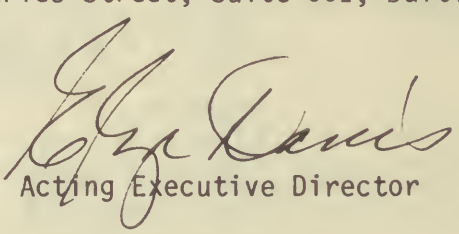
With the approval of the Executive Committee, the Faculty has joined with a growing group of state medical societies called the Alliance of State Physician Networks, Inc. to inquire into and respond to the proposal by the Department of Defense to restructure the CHAMPUS program. Faculty President, Donald T. Lewers, M.D., serves as Vice Chairman of the Alliance. The organization is chaired by John D. Watson, Jr., M.D., President of the Medical Association of Georgia. The aim of the Alliance is to organize a multiregional response to the Department of Defense and to strengthen physician input in the Champus Reform Initiative and other proposals that alter the delivery and method of payment for health care.

YOUNG PHYSICIANS

At its June meeting, the American Medical Association established a new section for young physicians - those who are under 40 years old or within the first five years of professional practice after Residency and fellowship training programs. An ad hoc Committee will develop and recommend to Council the mechanism through which the Faculty will respond to this initiative. The aim of this organization is to encourage physicians just entering practice to participate actively in organized medicine. Your thoughts and ideas are encouraged. If you have suggestions, please direct them in writing to Chairman, Young Physicians Committee, 1211 Cathedral Street, Baltimore, MD 21201.

MARK YOUR CALENDAR

The 6th Annual Maryland Health Care Convocation will be held November 13 and 14 at the Baltimore Convention Center. Friday morning, November 14, the Faculty and the Central Maryland Health Systems Agency will sponsor a session, "Is Cost Containment Undermining Quality of Care?" Speaking for the Faculty will be Gerald A. Schenken, M.D., member of the Board of Trustees of the American Medical Association. His co-panelist will be Eugene Feinblatt, Esq., who chaired the Governor's Task Force on Health Care Cost Containment in 1984. Please plan to attend this important event. Registration fee is $80 per person prior to October 15 and $95 there after. Registration for three or more people from the same organization is $70 per person. Mail checks to Maryland Health Convocation 1986, 516 North Charles Street, Suite 501, Baltimore, MD 21201.



Acting Executive Director

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Pediatric Morning Report from The Johns Hopkins Children's Center

Where is the Calcium?

During the course of the presentation of a newly admitted three-year-old white female, it was noted that the child was on a milk-free diet. "Where does the child get her calcium?" was the question asked by one resident in the group. We forget that people lived quite well long before cows were available for milking. A quick survey of a standard nutrition book disclosed the following nondairy foods that are rich sources of calcium:

	Calcium (Mg per 100 gm)
Apricots, dry	86
Figs, dried	186
Oat breakfast cereal	160
Soybean flour	265
Boston brown bread	185
Pancakes, wheat	199
Pancakes, buckwheat	249
Waffles	192
Almonds, dry	254
Muffins	206
Mackerel	185
Sardines	386
Pilchards	381
Egg yolk	147
Blackstrap molasses	579
Beet greens	118
Dandelion greens	187
Kale	225
Mustard greens	220
Parsley	193
Turnip greens	259
Watercress	195
Red kidney beans	163
Beans	160
Broccoli	130

A diet of grains, greens, and fish can provide all the calcium a person needs. Is it any wonder that our predecessors had such strong bones—bones that have lasted for millions of years? (Burton, B. *Human Nutrition*, 3rd Ed. New York: McGraw-Hill, 1976.)

• • •

Age and Symptoms of a Urinary Tract Infection

A two-year-old white male was admitted with a temperature of 40°C (104°F) with no localized findings. One day after admission, the urine culture was reported as positive for the presence of E. coli with more than 100,000 colonies. The resident who had examined the patient was puzzled by the laboratory report because a very careful physical exam had failed to disclose any pain in either the abdomen or the flank. As revealed by a study by Boineau and associates, this is not uncommon. The symptoms and signs of a urinary tract infection vary with the age of the patient as shown in the table below. Flank or abdominal pain accompany a urinary tract infection in only approximately 10 percent of children from 2 to 6 years old. (Boineau, F. G. and Lewy, J. E. *Pediatr Ann* 64(1975):515.)

Patients with Various Symptoms by Ages (in percents)

Presenting Symptom	Newborn to 1 Mo	1 Mo to 2 Yr	2–6 Yr	6–18 Yr
Failure to thrive, feeding problem	65	40	7	0
Diarrhea/vomiting	42	42	16	3
Unexplained fever	30	36	22	50
CNS*	29	7	9	5
Purulent meningitis	8	—	—	—
"Sepsis," jaundice	47	0	0	0
Colic, irritability, screaming attacks	0	15	5	0
Discolored or malodorous urine	0	9	14	0
Urgency, frequency, dysuria	0	8	44	41
Abdominal or flank pain	0	0	10	66
Enuresis	0	0	38	29

* Central nervous system disorders including convulsions, hypotonicity, irritability, sluggishness, respiratory irregularities.

• • •

Fall in the Blood Urea Nitrogen

A six-month-old was admitted for rehydration after a bout of both vomiting and diarrhea. Upon admission, his blood urea nitrogen was 31 mg%. The mild azotemia appeared compatible with his history and clinical examination. A repeat BUN obtained 24 hours after admission and adequate rehydration was 24 mg%. An underlying abnormality of the kidney was immediately suspected because of the failure of the BUN to fall to half the admission value in 24 hours or less, as occurs in all children with uncomplicated dehydration and diarrhea. Renal ultrasound revealed the presence of bilateral cystic disease of the kidneys. A nomogram prepared by Brill and associates can be used to chart the expected fall in the blood urea nitrogen. (Brill, C.B.; Uretsky, S.; and Gribetz, D. *J Pediatr* 52(1973):197.)

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PREVENTIVE MEDICINE ADMINISTRATION
MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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SEPTEMBER 1986

RECOMMENDATIONS FOR PREVENTION OF TRANSMISSION OF HTLV-III INFECTION IN THE WORKPLACE

Personal Service Workers

1. Routine screening for antibodies to HTLV-III has not been recommended for any occupational group. Personal service workers (PSWs) are those whose occupations involve close personal contact with clients (e.g., barbers, hairdressers, cosmetologists, manicurists, etc.).

2. HTLV-III infection is transmitted by sexual contact, injection of contaminated blood or blood products or from mother to infant during the birth process. Transmission to co-workers would require exposures such as listed above. Risk of transmission from client to personal service worker (PSW) or from PSW to client would exist only in situations when there would be access of blood or body fluids of the infected person to the open tissue of the susceptible person. A risk of transmission from client to client exists when instruments contaminated with blood are not sterilized or disinfected between clients. Studies of hepatitis B transmission indicate that any such risk of transmission is extremely low.

3. PSWs whose services require needles or instruments that penetrate the skin should follow DHMH guidelines for Health Care Workers (in July Newsletter). These PSWs include but are not limited to: tattooists, acupuncturists, electrolysists, ear piercers, etc.

4. All PSWs should be educated regarding transmission of bloodborne infections. Good hygiene, antisepsis and disinfection should be emphasized.

5 Instruments that penetrate the skin should be used once and disposed of or be thoroughly cleaned and sterilized after each use using procedures recommended for use in health care facilities.

6. Instruments which, although not intended to penetrate the skin, become contaminated with blood (e.g. razors) should be used for only one client and be disposed of or thoroughly cleaned and disinfected after use using procedures recommended for use in health care facilities.

7. Any PSW, regardless of HTLV-III infection status, with exudative lesions or weeping dermatitis on the hands or area that is not adequately covered should refrain from direct contact with clients until the condition clears.

Food Service Workers

8. Food-service workers (FSWs) are those whose occupations involve preparation or serving of food or beverages.

   a. All epidemiologic and laboratory evidence indicates that bloodborne and sexually-transmitted diseases are not transmitted during the preparation or serving of food.

   b. All FSWs should follow recommended standards and practice of good personal hygiene and food sanitation.

   c. Care should be exercised to avoid injury during food preparation. Should injury occur, food contaminated with blood should be discarded.

General

9. In any work setting, equipment or surfaces contaminated with blood or body fluids, regardless of the HTLV-III infection status of the source person, should be cleaned with soap and water or detergent. Disposable gloves should be worn when cleaning up such spills. After cleaning with detergent and water, the area should be wiped with a disinfectant solution or a freshly prepared solution of 1 part household bleach (5.25% sodium hypochlorite) mixed in 9 parts water.

10. There is no known risk of transmission of HTLV-III infection in other common work settings, such as offices, schools, factories, etc. Workers known to be HTLV-III infected should not be restricted on this basis alone. They should not be restricted from using telephones, office equipment, toilets, showers, eating facilities and water fountains.

Adapted from: MMWR, Vol. 34, No. 45, 1985.

GUIDELINES TO PREVENT TRANSMISSION OF HUMAN T-LYMPHOTROPIC VIRUS TYPE III (HTLV-III) FROM HEALTH CARE WORKERS TO PATIENTS

A risk of transmission of HTLV-III infection from Health Care Worker (HCW) to patient would theoretically exist in situations where there was a high degree of trauma to the patient, such as in invasive procedures such as surgery or dental procedures thereby providing a portal of entry and trauma to the HCW, such as a scalpel wound or needlestick thereby providing access to the blood of the infected HCW.

The Centers for Disease Control has published guidelines concerning HCWs who perform invasive procedures and have HTLV-III infection.

1. HCWs who do not perform invasive procedures need not be restricted from work unless they have evidence of other infection or illness for which any HCW would be restricted from work.

2. Routine screening of HCWs for antibodies to HTLV-III is not recommended to prevent transmission of HTLV-III. However, serological testing should be available to HCWs wishing to know their serological status.

3. All HCWs, regardless of whether they perform invasive procedures, should:

   a. Wear gloves for direct contact with mucous membranes or non-intact skin of all patients.

   b. Refrain from all direct patient care and from handling patient care equipment whenever the HCW has an exudative lesion or weeping dermatitis on the hands or on an exposed surface of the body which is not adequately covered.

4. If a patient has a parenteral or mucous membrane exposure to the blood or body fluids of a HCW; the patient should be informed of the incident and the same procedures detailed in "Management of Parenteral and Mucous Membrane Exposures to Blood and Body fluids" (DHMH December, 1985) followed.

5. HCWs known to be infected with HTLV-III and who have defective immune systems may be at risk of occupational acquisition of other infectious disease in the course of caring for patients. The HCWs personal physician may contact the local health department (LHD) for advice on risks of exposure to communicable diseases. The HCWs personal physician, in conjunction with the institution's personnel health services or medical director, should determine on an individual basis whether an HTLV-III infected HCW can safely and adequately perform assigned patient-care duties and making changes in work assignments.

6. Recommendations of the Immunization Practices Advisory Committee and institutional policies concerning requirements for vaccinating HCWs with live virus vaccines should be considered when making decisions regarding work assignments.

Adapted from MMWR, Vol. 34, No. 45, 1985.

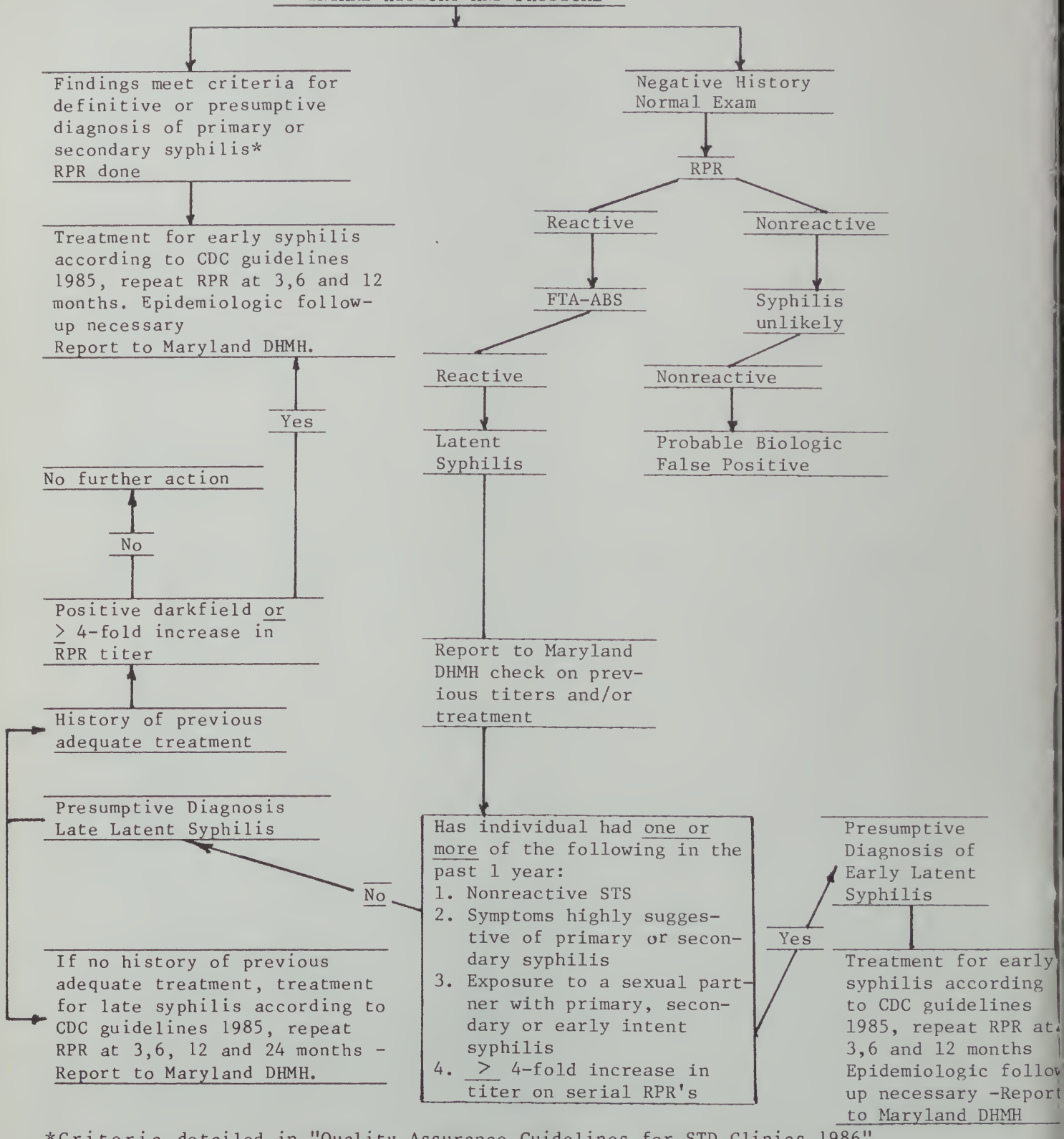
RELEASE OF BOTULISM ANTITOXIN

Botulism antitoxin for patients with signs and symptoms of human foodborne or wound botulism is released to physicians by CDC from its quarantine stations located throughout the United States. Any health-care provider requesting botulism antitoxin should first contact his/her state health department. In Maryland, between 8:00 a.m. and 4:30 p.m., please call (301) 225-6677 or (301) 243-8700 during nights, weekends and holidays. If for some reason the state health department is unreachable during nights or on weekends, CDC may be called at (404) 329-2888 (24-hour number).

When botulism is suspected, a careful food history, especially for home-canned vegetables or fruits, should be sought, and the suspected food items, saved. Stool and serum should be obtained from patients with possible botulism and refrigerated. Electromyography should be done using repetitive stimulation at 40 Hz or greater. When indicated, cerebrospinal fluid should be examined for white blood cells and protein, and a Tensilon challenge test should be done. The patient's vital capacity should be monitored. The results of these tests are helpful in evaluating the need for botulism antitoxin.

Adapted from: MMWR, Vol. 35, No. 30, 1986.

SYPHILIS IN CLINICAL PRACTICE



*Criteria detailed in "Quality Assurance Guidelines for STD Clinics 1986", U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Atlanta, Georgia, October 1986, pp 33 and 34.

These guidelines will be submitted in the next issue of the October 1986 Newsletter.

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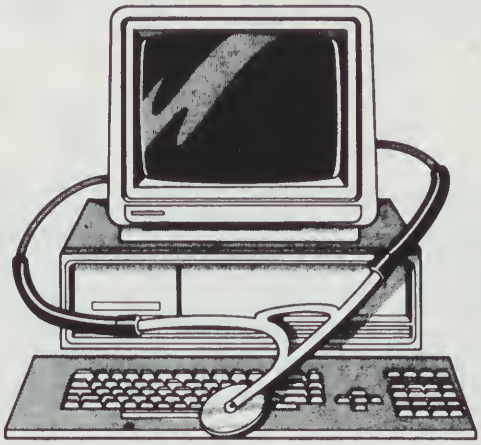
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Adjuvant Therapy For Breast Cancer

In September 1985, the National Institutes of Health convened a Consensus Development Panel for the second time in five years to discuss the role of adjuvant chemotherapy and hormonal therapy for breast cancer. The purpose of the panel was to make recommendations based on their absolute certainties derived from controlled clinical trials. Their conclusions can be summarized:

1. Adjuvant chemotherapy significantly improves the survival of premenopausal women with axillary lymph node metastases, regardless of whether their tumor cells contain steroid hormone receptors.

2. Adjuvant hormonal therapy with noncytotoxic anti-estrogenic agent is the treatment of choice for postmenopausal breast cancer patients with lymph node involvement and positive hormone receptor levels.

3. Because of lack of definite data, the committee fell short of advocating cytotoxic chemotherapy for any subgroup of patients other than premenopausal women with axillary lymph node metastases. Adjuvant chemotherapy should be considered in certain premenopausal women without lymph node involvement, postmenopausal women with lymph node involvement and negative hormone receptor levels, and certain postmenopausal women without lymph node involvement, regardless of their hormonal receptor status.

The Committee did not prefer any one chemotherapy regimen as there are no data to compare efficacy. However, the panel recommended adherence to an established regimen including dosages and method of administration. They emphasized that adjuvant programs should be initiated as soon as possible after surgery, when the tumor load is minimal and at the micro level. Theoretically, tumor cells in this setting may be more sensitive to cytotoxic agents. In addition, mathematical models suggest that prompt institution of adjuvant therapy may help reduce the chance of drug resistance. Furthermore, the panel reported that hormonal therapy is well tolerated and the long-term toxicity (up to eight years) appears to be negligible.

Recent data from the National Surgical Adjuvant Breast and Bowel Project (NSABP) indicated that adjuvant chemohormonal therapy is very beneficial in pre- as well as postmenopausal women with one or more involved axillary lymph nodes and estrogen receptor positive tumors. This was found superior to adjuvant chemotherapy alone. The improvement in survival is even more pronounced in those patients with high levels of estrogen receptor (ER) tumors. Therefore, the NSABP is in pursuit of answers to some very important questions, such as the role of adjuvant chemotherapy and hormonal therapy in early carcinoma of the breast, that is, Stage I, negative axillary lymph nodes. Patients with breast carcinomas who underwent definitive surgery and were found to have uninvolved axillary lymph nodes are subdivided to: (a) patients with ER positive tumors, that is, 10 fml/gm protein or more, are randomized to receive Tamoxifen *vs* placebo; (b) patients with ER negative tumors, that is, less than 10 fml/gm protein are randomized to receive chemotherapy or no further treatment. In this situation, the chemotherapy consists of nonalkylating agents, methotrexate and 5-FU for one year. This will define the value of hormonal therapy and chemotherapy in Stage I breast cancer. On the other hand, patients with one or more positive lymph nodes in the axilla are divided according to their receptor status as before. Those with ER of 10 fml/gm protein or higher are randomized to receive hormonal therapy only, Tamoxifen *vs.* Tamoxifen plus a variety of chemotherapeutic approaches. Those with ER less than 10 fml/gm protein receive the same variety of chemotherapy without Tamoxifen. Such chemotherapy compares CMF (cytoxan, methotrexate, 5-FU) for six months *vs* CA (cytoxan + Adriamycin) for four months, followed by six months of no treatment, then another course of CA *vs* standard L-PAM + 5-FU for two years. This is the first attempt to answer the question whether one chemotherapy program is more effective than another.

The Surgical Oncology Program is an active member of NSABP, and we seek patients with breast carcinomas to be entered on these programs to resolve these important therapy issues. If you have any questions, do not hesitate to call.

Tumor Conferences are held weekly on Fridays between 8–9 a.m. in Room N13E28 at the University of Maryland Hospital. This is an open meeting; physicians are welcome to attend and to present cases; but please call 528-5224 before Friday to obtain scheduled time for your case(s) and bring pathological slides.

E. GEORGE ELIAS **MD**
Professor of Surgery
Director, Surgical Oncology Program
University of Maryland

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

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Bones, Ovaries, and Anorexia Nervosa

ARNOLD ANDERSEN MD

While treating patients with anorexia nervosa at Johns Hopkins Department of Psychiatry, we recently found that seven out of nine patients have some degree of osteoporosis. Initially, only severely ill patients were tested with a new photon-absorptiometry apparatus to diagnose and treat possible osteoporosis. Because the results of the test were so striking we believe that the test is important for any patient who has been underweight, amenorrheic, and restricting food for any substantial period. A nineteen-year-old college student in our program who has been ill for several years was found to have the bones of a sixty-five-year old woman.

The thread connecting the origin of this disorder to its multiple sources has led us in several different directions. When patients were asked to compile lists of what they considered "safe" and "dangerous" foods, they listed normal dairy products as generally being on the dangerous (that is, fattening) list. The combination of low calcium intake, lack of normal estrogens because of amenorrhea, and decreased exercise lead, in most cases, to the development of osteoporosis. Anorexia nervosa as a behavior to cope with fundamental issues in personality development has dangerous medical consequences. The mediating factor is the belief of patients that it is more important to be thin than healthy: they refuse to eat foods they believe add weight.

In our treatment program, the sequence of therapeutic strategies has been to engage in vigorous nutritional rehabilitation along with a stepwise series of psychotherapy modalities beginning with supportive psychotherapy, moving on to psychoeducational efforts, then concentrating on cognitive psychotherapy to deal with irrational thoughts, psychodynamic and ultimately existential psychotherapy. A major barrier to treatment is patients' belief "I don't want to gain any more weight. I'm already fat." To prevent repetition of unhealthy family battles over control of eating, we have tried to engage patients' "observing ego" in looking at some medical data with us that will help convince them that a healthy weight has not yet been obtained.

Preliminary evidence from research in the United Kingdom indicates that patients, even prior to attaining sufficient weight for restoration of their menstrual cycles and receiving the necessary estrogen to prevent bone loss, will develop a dominant cyst in the ovary. In the anorectic state the ovaries are small with many tiny follicles. The ovary progresses through a natural series of developmental stages until a sufficient weight is achieved to allow it to resume its normal adult functioning. Showing the patients the reports of the diminished mineral content of their bones, as well as the state of their ovaries as determined by sonograms, often leads to their cooperation in treatment.

These research results are only preliminary; however, they do illustrate the complexity of anorexia nervosa. What begins as an adaptational response to a developmental crisis in a vulnerable person living in a weight-conscious society becomes an ingrained biologic process that promotes the development of a chronic sick role and lack of age-appropriate activities. Our real goal is to prevent chronic illness in these individuals.

No biologic cause of anorexia nervosa has been found, nor do we expect one will be found. Profound biological consequences result, however, and are intertwined in the development and maintenance of the disorder. Patients suffering from anorexia need support to enable them to exist comfortably in a society saturated with excess concerns about eating and weight. This story has just begun to unfold.

Bibliography

Andersen, A.E. *Comprehensive Practical Treatment of Anorexia Nervosa and Bulimia.* Baltimore: Johns Hopkins University Press, 1985.

Brotman, A.W. and Stern, T.A. "Osteoporosis and Pathologic Fractures in Anorexia Nervosa." *Am J Psych* 142(1985):495–96.

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Smoking
Part I: Economic and Health Costs

DAVID S. PRINCE MD and PETER B. TERRY MD

Data are presented that identify smoking as the single most important preventable cause of excess morbidity and premature death, document economic costs and diseases related to smoking, and describe changing patterns of tobacco use.

Dr. Prince is Instructor and Dr. Terry is Associate Professor, Johns Hopkins School of Medicine, Department of Medicine.

The death toll attributable to tobacco use in the United States alone amounts to a preventable yearly excess mortality of 350,000 deaths.[1] It has been estimated that an average of 5½ minutes of life is lost for each cigarette smoked, resulting in an average reduction in life expectancy of five to eight years for cigarette smokers.[2] In addition to its effects on mortality, cigarette smoking is responsible for substantial morbidity in terms of cardiovascular and pulmonary disease. The goal of this and subsequent articles in this series will be to examine more closely the impact of smoking on society in both health and economic terms, focusing primarily on the cardiovascular effects of smoking. Since the deleterious effects of smoking are largely preventable and the health benefits of quitting have been clearly established, emphasis will be placed on smoking prevention and cessation, as well as on resources available within Maryland to help patients quit.

Economic Costs

Current annual estimates of the economic costs of cigarette smoking to society are approximately $39 to $55 billion (1983 dollars) yearly in the United States.[3] These estimates consider total direct health-care expenditures as well as indirect costs, such as lost productivity and lost earnings from excess disability and premature death. Recently attention has been focused on estimating the costs to the individual of a lifetime of cigarette smoking.[4] Personalized cost estimates are of obvious interest to the insurance underwriting industry, but in addition they have been used as a major motivating factor in cessation and prevention programs. For example, for a male smoker aged 40 to 44, the lifetime costs of smoking range from $20,000 to $57,000 (1980 dollars) depending on the amount smoked.

Smoking-Related Diseases

In terms of overall impact, the major health consequences of tobacco use can be ascribed to three smoking-related diseases: cardiovascular disease, lung cancer, and chronic obstructive pulmonary disease. The most recent data available indicate that among the 565,000 annual deaths from coronary heart disease, 30 percent (170,000) are directly attributable to smoking.[1] In addition, at least 30 percent of the annual cancer deaths in the United States (about 150,000) are the result of smoking, primarily due to lung cancer.[5] Chronic obstructive lung diseases contribute another 62,000 smoking-related deaths per year.[6] A more exhaustive list of smoking-related disease processes is seen in the Table.

Adverse Cardiovascular Effects

Cigarette smoking is the single most preventable cause of coronary heart disease for both males and females.[1] Smokers have a 70 percent higher mortality rate from coronary heart disease than do nonsmokers.[1] Furthermore, there is a strong dose-response relationship such that, for heavy smokers who consume two or more packs per day, the mortality rate for coronary heart disease is two to three times that for nonsmokers. Although cigarette smoking is one of the three major independent risk factors for coronary heart disease, it also appears to act synergistically with hypertension and hypercholesterolemia, increasing risk by several fold. Similar synergestic effects are seen in women smokers using oral contraceptives, who have approximately a tenfold increase in coronary heart disease mortality rate as compared to nonsmoking women who do not use oral contraceptives.[7] For both male and female smokers the risks of death from coronary disease

Table. Health Consequences of Cigarette Smoking

1. CARDIOVASCULAR
   - CORONARY HEART DISEASE
   - Peripheral arterial occlusive disease
   - Cerebrovascular Disease
   - ?Renovascular hypertension
2. CANCER
   - LUNG
   - Larynx and oral
   - Esophagus
   - Bladder
   - Pancreas
   - ?Stomach
   - ?Kidney
3. CHRONIC OBSTRUCTIVE PULMONARY DISEASE
4. PEPTIC ULCER DISEASE
5. PERIODONTAL DISEASE

HBP Commentary is contributed by the Maryland Commission on High Blood Pressure and Related Cardiovascular Risk Factors, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

increase with early initiation of smoking, prolonged duration of smoking, and deep inhalation of tobacco smoke. The risk to pipe and cigar smokers is intermediate between that of nonsmokers and cigarette smokers.[1]

This across-the-board increased risk of mortality from coronary heart disease associated with smoking is reversible with cessation of smoking. The risk of coronary heart disease attributable to smoking declines by approximately half within the first year of smoking cessation but does not reach levels of a lifelong nonsmoker for at least 10 years.[1] However, recent studies indicate that even among elderly smokers aged 65 to 74 years the excess risk of mortality declined within one to five years after smoking cessation.[8] Furthermore, it has been shown that chances of survival are improved by stopping smoking once coronary artery disease has become clinically manifest.[9]

The adverse cardiovascular effects of cigarette smoking are not limited to coronary artery disease. Tobacco use strongly predisposes to the development of atherosclerotic peripheral vascular disease.[10] Smoking is highly prevalent in individuals with aortoiliac (98 percent) and femoropopliteal (91 percent) disease.[11] Mortality rates for cerebrovascular disease also are elevated in smokers, although the effect is not as prominent as that seen with coronary artery and peripheral arterial occlusive disease.[10] As is the case for coronary disease, smoking acts synergistically with oral contraceptives in increasing the risk for stroke, especially thromboembolism and subarachnoid hemorrhage. Most startling is the data published by Petitti *et al.* in which the relative risk for stroke among women smokers was 5.7 times that of nonsmokers, whereas women smokers who also used oral contraceptives had a relative risk *21.9* times that of nonsmoking women.[12]

Disease of the Lung

Lung cancer is a modern tragedy of epidemic proportions. In 1986 an estimated 130,000 people will die from lung cancer in the United States; 2,700 of these deaths will occur in Maryland.[13] Eighty-five percent of lung cancer deaths in the United States are related to cigarette smoking and could have been avoided had these individuals not smoked.[5] While lung cancer incidence and mortality have been lower in women than men, due to the temporal lag in women's smoking habits, the incidence of lung cancer is now increasing faster in women than among men. In 1985 lung cancer became the leading cause of cancer deaths in women.[13]

In ex-smokers lung cancer mortality is inversely related to the number of years since quitting smoking. Results of the British physician study[14] revealed that approximately five years after smoking cessation lung cancer mortality rates for ex-smokers had dropped to 40 percent of that of current smokers. By 15 years of smoking cessation, ex-smokers had a mortality rate only slightly higher than that of nonsmokers.

The epidemiologic evidence linking cigarette smoking with chronic obstructive lung disease is irrefutable. A number of studies have reported the relative risk for chronic obstructive lung disease in heavy smokers to be as high as 30 times that of nonsmokers.[6] Unlike victims of coronary heart disease and lung cancer, those smokers likely to develop severe functional impairment from obstructive lung disease readily can be identified. A relatively low breathing test (FEV_1) by middle age, as well as a faster than expected fall in FEV_1 from year to year, are reliable indicators of future development of disease.[15]

Changes in Prevalence and Patterns of Smoking

Although the prevalence of cigarette smoking has decreased steadily since the publication of the first Surgeon General's Report on Smoking and Health in 1964, millions of Americans still smoke. Nevertheless, there have been some changes in smoking patterns. While the percentage of all US men over the age of 20 who were current smokers declined from 38 percent in 1980 to 35 percent in 1983, the decline for women of

HBP Commission Expands Responsibilities

As of July 1, 1986, the High Blood Pressure Commission was renamed the Maryland Commission on High Blood Pressure and Related Cardiovascular Risk Factors, reflecting its enlarged responsibilities.

In mid-1985 the success with which the Commission performed its mandate since 1976 and the need to establish guidelines for the effective management and treatment of cardiovascular risk factors other than high blood pressure, caused the Workgroup on Wellness/Disease Prevention, Environmental Matters Committee, Maryland House of Delegates, to introduce a bill changing the name of the Commission and expanding its responsibilities. The bill was passed by the General Assembly and signed into law by Governor Hughes.

the same age was less encouraging, dropping only from 29.4 percent in 1980 to 29.1 percent in 1983.[16] Contrasting these figures with 1965 smoking prevalences, 52.4 percent for men and 34.1 percent for women, emphasizes that the major decline in cigarette smoking has occurred among men. While overall cigarette consumption has declined, there does appear to be a recalcitrant group of heavy smokers. As of 1980, the percentage of smokers classified as heavy smokers (greater than 25 cigarettes per day) had increased to represent 35 percent of all male smokers and 24 percent of female smokers.[17]

There have been major shifts in cigarette preferences toward lower tar and nicotine brands over the last 30 years. Average tar content has declined from 38 mg to 12 mg per cigarette in 1983, and average nicotine content from 2.3 mg to below 1.2 mg.[18] These patterns of low tar cigarette consumption reflect the widespread misperception that less hazardous cigarettes exist; unfortunately the available data do not support these contentions. Evidence from the Framingham study suggests that smokers of lower tar and nicotine cigarettes do not have a lower incidence of congestive heart failure.[19] While a large cohort study did reveal that smokers of brands lower in tar and nicotine had an overall mortality rate 9 percent lower than that of smokers of high tar and nicotine cigarettes, lung cancer and its overall mortality rates were still far in excess of that for nonsmokers.[20]

Conclusion

Cigarette smoking is the major preventable cause of increased mortality and premature disability in the United States. Its burdensome health and economic consequences are directly related to coronary and other cardiovascular diseases, lung and other cancers, and chronic obstructive pulmonary disease. Less hazardous cigarettes appear to be a misleading concept. The key to the present lies in smoking cessation; the key to the future, in smoking prevention. In our next article we will discuss smoking cessation methods.

References

1. Department of Health and Human Services. *The Health Consequences of Smoking: Cardiovascular Disease. A Report of the Surgeon General 1983.* Rockville, MD.
2. Department of Health, Education, and Welfare. *Smoking and Health: A Report of the Surgeon General 1979.* Washington, DC.
3. Schultz, J.M. "Perspectives on the Economic Magnitude of Cigarette Smoking." *NY State J Med* 79(1985):302–306.
4. Oster, G.; Colditz, G.A.; and Kelly, N.L. "The Economic Costs of Smoking and Benefits of Quitting for Individual Smokers." *Prev Med* 13(1984):377–89.
5. Department of Health and Human Services. *The Health Consequences of Smoking: Cancer. A Report of the Surgeon General 1982.* Rockville, MD.
6. Department of Health and Human Services. *The Health Consequences of Smoking: Chronic Obstructive Lung Disease. A Report of the Surgeon General 1984.* Rockville, MD.
7. Shapiro, S. *et al.* "Oral Contraceptive Use in Relation to Myocardial Infarction." *Lancet* 1(1979):743–46.
8. Jajich, C.L.; Ostfeld, A.M.; and Freeman, D.H. "Smoking and Coronary Heart Disease Mortality in the Elderly." *JAMA* 252(1984):2831–34.
9. Vlietstra, R.E. *et al.* "Effect of Cigarette Smoking on Survival of Patients with Angiographically Documented Coronary Artery Disease." *JAMA* 255(1986):1023–27.
10. Fielding, J.E. "Smoking: Health Effects and Control." *N Engl J Med* 313(1985): Part I: 491–98; Part II: 555–62.
11. Kannel, W.B. and Shurtleff, D. "The Framingham Study: Cigarettes and the Development of Intermittent Claudication." *Geriatrics* 28(1973):61–68.
12. Petitti, D.B. and Wingard, J. "Use of Oral Contraceptives, Cigarette Smoking, and Risk of Subarachnoid Haemorrhage." *Lancet* 2(1978):234–35.
13. Silverberg, E. and Lubera, J. "Cancer Statistics, 1986." *Cancer* 36(1986):9–26.
14. Doll, R. and Hill, A.B. "Lung Cancer and Other Causes of Death in Relation to Smoking: A Second Report on the Mortality of British Doctors." *Br Med J* 2(1956):1071–81.
15. Mason, R.J. *et al.* "Cigarette Smoking and Health." *Am Rev Resp Dis* 132(1985):1133–36.
16. National Center for Health Statistics, Division of Health Interview Statistics. Data from the National Health Interview Survey May, 1984; Rockville, MD.
17. United States Department of Agriculture. *Tobacco Outlook and Situation Report.* Washington, DC: March, 1984.
18. Richert, W.S. "Less Hazardous Cigarettes: Fact of Fiction?" *NY State J Med* 83(1983):1269–72.
19. Castelli, W.P. *et al.* "The Filter Cigarette and Coronary Heart Disease: the Framingham Study." *Lancet* 2(1981):109–13.
20. Lee, P.N. and Garfinkel, L."Mortality and Type of Cigarette Smoked." *J. Epidemiol Community Health* 35(1981):16–22.

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One Minute with Diabetes

Doctor, there are a number of different insulin syringes available in the drug stores. Which type or brand name should I purchase?

Most syringes are made of plastic rather than glass, because they cost less and are sterile and disposable. Some patients use the plastic syringes for several injections, rather than discard them after a single use. If this is done, the plunger should be moved back and forth a few times to clear any residual insulin from the lumen of the needle, and the cover placed over the needle when not in use. The syringe should not be washed under the faucet or stored in alcohol. When the syringe is discarded, it should be broken in such a way that it cannot be retrieved for use by an addict.

In this country, almost all insulin used is U-100 and syringes are available in U-50 and U-100 volume types. A 2 ml U-100 disposable syringe is available on special order for those few persons requiring more than 100 units for a single injection. For most patients it is preferable to use the U-100 volume type even though the present dose is less than 50 units. Then if illness or other problems necessitate increasing the dose to more than 50 units, it is done easily.

In recent years syringe needles have been reduced in the size of the lumen from 26 G to 28½ G and are promoted as *super fine* or *ultrafine*. They are almost painless when used. However, the small lumen of the needles makes plugging with insulin more common, particularly when Lente insulin is used. However, that can be overcome by adequate mixing of the insulin suspension before withdrawal of the material.

The needle of the syringe should be molded into the plastic during manufacture; this prevents separation at the time of making the injection and decreases the dead space at the end of the plunger for residual insulin to be stored.

The plunger should be a contrasting color (ideally orange) to identify with the U-100 color scheme, permitting easier measurement of the insulin dose by contrasting the plunger from the barrel of the syringe. The distal portion of the plunger should fit closely into the discharge end of the syringe to minimize any residual dead space and produce maximal delivery of the measured dose.

Lettering and scale on the syringe barrel should be sharp, very legible, and not easily rubbed off.

Syringes manufactured outside the United States are usually inferior to those made here. A traveler should take an adequate supply of good syringes. A number of excellent brand name syringes are available in this country at very competitive prices. Diabetic patients should try syringes from the different manufacturers to determine which is most practical for their needs.

DeWITT E. DeLAWTER MD
Editor

Medical Miscellany

Request for Research Proposals

The Paralyzed Veterans of America will issue a "request for proposals" on October 1, 1986, for a research project to generate, analyze, manage, and disseminate information on the economic consequences of spinal cord injury (SCI). Proposals will be accepted no later than close of business (6 p.m. EST) on December 15, 1986. The anticipated announcement of the award is January 28, 1987, with contract activities commencing in February 1987. For further information or to be placed on a list to receive a copy of the request for proposal, contact Thomas Stripling, Senior Associate Research Director; Paralyzed Veterans of America, 801 Eighteenth St. NW, Washington, DC 20006 (202-872-1300).



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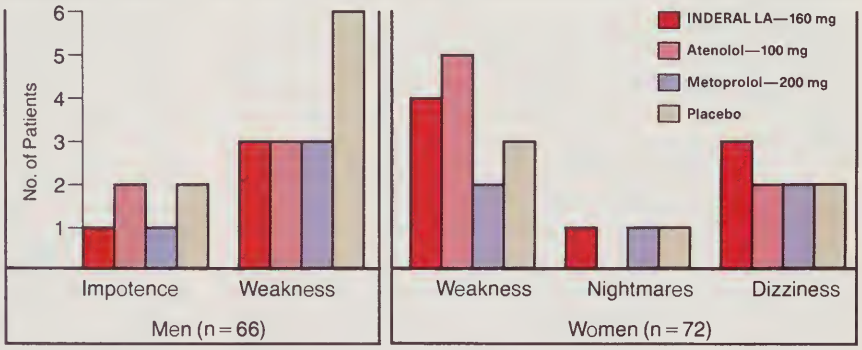
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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block, hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura; thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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REFERENCE:

1. Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321–1323.

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The Swiss Seat Belt Law: Lessons for the United States

JAMES F. BURRIS MD

The low rate of use of seat belts by motorists in the United States is widely decried. Switzerland recently enacted a mandatory seat belt law; seat belt use increased substantially, and there was a reduction in motor vehicle accident death and injury rates. The United States and Switzerland have similar rates of highway fatality and injury despite differences in seat belt use, speed limits, highway engineering, and characteristics of cars on the road. Maryland, as well as a number of other states, recently instituted mandatory seat belt laws. A comparison of the Swiss and United States experiences may reveal ways to improve traffic safety in both countries.

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While the infrequent use of automobile seat belts by motorists in the United States has been documented and deplored repeatedly in medical and public health literature,[1-6] the resistance of the U.S. public, its elected representatives, and the domestic automobile industry to the use of seat belts and passive restraint devices such as air bags is general knowledge. The efficacy of seat belts in protecting vehicle occupants from serious injury in automobile accidents is well established.[7] It is estimated that lap belts alone can prevent 27 percent of major injuries in vehicular accidents, and the combined lap belt-shoulder harness can prevent 42 percent of such injuries.[3]

Many political jurisdictions outside the United States have laws mandating the use of seat belts in private automobiles.[8] Their experience may shed light on ways to improve traffic safety in the U.S. Switzerland instituted a mandatory seat belt law in 1982 after previously rejecting such a law on the ground that it violated personal freedom, an argument much heard in America. Under Swiss law, drivers are responsible if their passengers fail to fasten their seat belts, and the police are authorized to issue citations for noncompliance. Extensive statistics on vehicular accidents compiled by the Swiss Federal Office for Statistics from police reports throughout that country make it possible to assess the effects of this law on the incidence of deaths and injuries sustained in automobile accidents in Switzerland. All data reported here are derived from publications of the Swiss Federal Office for Statistics.[9,10]

The Swiss Experience

In 1981, the last year prior to the mandatory seat belt law, Switzerland had a population of approximately 6.5 million people and registered 2,394,455 passenger cars. Swiss police recorded 67,919 accidents in that year. Personal injuries or death occurred in 25,245 of the accidents in 1981. Of a total of 94,435 drivers involved in accidents recorded in 1981, 60,348 were wearing a seat belt, and 24,564 were not. Information on seat belt use was not recorded for 9,523. Thus, even prior to the institution of the mandatory seat belt law, at least 64 percent of all drivers involved in an accident (71 percent of those with data) were wearing seat belts.

After institution of the mandatory seat belt law in 1982, the Swiss recorded 95,635 drivers involved in accidents of whom 90,004 (84 percent of the total and 90 percent of those with data) were wearing seat belts. Thus, there was a substantial increase of about 20 percent (above an already high rate) in seat belt use after institution of the law.

Table 1 documents the distribution of severity of injuries sustained in automobile accidents in 1981 according to whether the driver was or was not wearing a seat belt. For purposes of these statistics, the Swiss authorities defined severe injuries as including fractures, cerebral concussion, internal injuries, cuts, lacerations, or severe contusions. Light injuries included abrasions, sprains, and all other superficial lesions that involved no incapacity for work or an incapacity for work lasting less than two weeks.[9] Compared to seat belt wearers, a smaller proportion of unbelted accident victims escaped injury, and there was a higher percentage of victims in each grade of severity of injury. The risk of serious injury was increased 270 percent and the risk of death more than 450 percent in the unbelted group compared to those wearing seat belts.

Table 2 (next page) displays the 1982 data in the same format. For seat belt wearers the percentage figures in each category of injury are virtually identical to those for 1981. However, percentage figures in each category of injury were worse for unbelted drivers in

Table 1. Personal Injuries 1981 (in percents)

Seat Belt Worn	No Injury	Light Injury	Severe Injury	Death
Yes	93.0	4.5	2.3	0.15
No	84.7	8.5	6.2	0.68
No data	92.6	3.6	3.2	0.60

Table 2. Personal Injuries 1982 (in percents)

Seat Belt Worn	No Injury	Light Injury	Severe Injury	Death
Yes	92.8	4.6	2.5	0.14
No	74.2	12.8	11.3	1.60
No data	92.8	2.7	3.6	0.82

1982 than in 1981. This may simply represent year-to-year variation since unbelted drivers were only 9 percent of the total in 1982. It is possible that the small minority of drivers still not using belts after passage of the law represents a population of scofflaws who have other high-risk driving habits and thus are an especially high risk of injury and death.

Implications

What are the implications of these observations and of recent trends in the United States? Most obviously, there is the hardly novel conclusion that safety belts save lives and reduce injuries from automobile accidents. The additional 20 percent of Swiss drivers who adopted the use of seat belts after passage of the mandatory seat belt law in that country appear to have obtained the same degree of protection as those drivers who had been using seat belts before passage of the law. If one assumes that the 1981 death rate for unbelted drivers would have applied to the 20 percent who adopted seat belts after passage of the law if they had not adopted seat belts, one can estimate that the 20 percent switch toward seat belt use may have saved 101 drivers' lives in 1982 in Switzerland.

If 90 percent of American motorists could be persuaded to use seat belts, instead of 11 percent as recently reported,[1] there certainly would be a major decrease in traffic fatalities. Even a 20 percent increase in use, like that seen in Switzerland after institution of the mandatory seat belt law, could have a significant impact on fatalities and serious injuries. A marked increase in seat belt use, with a concomitant fall in automobile accident deaths and injuries, has followed institution of mandatory seat belt laws in a number of other countries.[8]

The U.S. and Switzerland have highway fatality rates of roughly comparable magnitude despite substantial differences between the two countries in seat belt use, speed limits, highway engineering, characteristics of the cars on the road, and other factors. Although the Swiss are prudent in their use of seat belts, other highway safety measures are notably lacking. Many roads are narrow, winding, and mountainous, and even the newer, better engineered roads frequently lack shoulders or guard rails. Warning and directional signs are seen there much less frequently than in the United States. Major intercity roads often have only one lane in each direction with no shoulders or divider strip and a speed limit of 120 kilometers (72 miles) per hour. Even in towns the speed limit is often 60 kilometers (36 miles) per hour. Gasoline costs the equivalent of $2.50 per gallon, and in consequence most automobiles driven in Switzerland are small, fuel-efficient models, a factor that increases the risk of injury to occupants in an automobile accident. Nevertheless, Switzerland has a somewhat lower highway injury and death rate than does the U.S. In 1979 (the most recent comparison year listed in the Swiss statistics), a total of 1,268 people were killed (2.0 per 10,000 inhabitants) and 32,440 injured (51 per 10,000 inhabitants) in traffic accidents in Switzerland.

In the United States that same year there were 51,088 traffic fatalities (approximately 2.3 per 10,000 inhabitants) and 2,000,000 injuries (approximately 89 per 10,000 inhabitants). Considering that only about 11 percent of U.S. drivers were using seat belts at that time,[1] one can speculate that failure to use these devices contributed to the higher death and injury rates in the U.S. despite better highway engineering, lower speed limits, and larger cars. This is good news, in that it suggests that considerable improvement in highway safety could be achieved in both countries if each adopted the best features of the other system to improve its own. Highway engineering, automobile safety design features, and better driving habits—including habitual use of seat belts—can contribute to lower highway fatality and injury rates in both countries.

As recent experience with mandatory motorcycle helmet laws in several U.S. states suggests,[11] an unpopular law cannot be imposed on an unwilling populace in a democracy regardless of the merits of the law. By contrast, the Swiss experience with the mandatory seat belt law suggests that such a law becomes self-enforcing once a majority consensus in favor of it has developed and the specific behavior has become the societal norm. Public health professionals face the problem of facilitating the development of a public consensus in support of use of seat belts, motorcycle helmets, good driving habits, and other preventive measures. In Switzerland, the institution of the mandatory seat belt law was preceded by a publicity campaign in favor of seat belt use by the Swiss Federal Office for the Prevention of Accidents. In addition, a number of major insurance companies reportedly threatened to refuse payment to persons injured in automobile accidents who had not been wearing a seat belt at the time of the accident.

The gradual decline in cigarette smoking in this

country in recent years suggests that public education campaigns can be effective in changing the unhealthy behaviors of an entire population in the United States as well. The idea of financially penalizing people for persisting in unhealthy behaviors poses more difficult moral issues, but it is clearly a potent incentive. Health professionals played a major role in the successful campaign to establish laws requiring child safety seat use in all 50 of the states and the District of Columbia, and they might be similarly effective in working for passage of mandatory seat belt laws.[12]

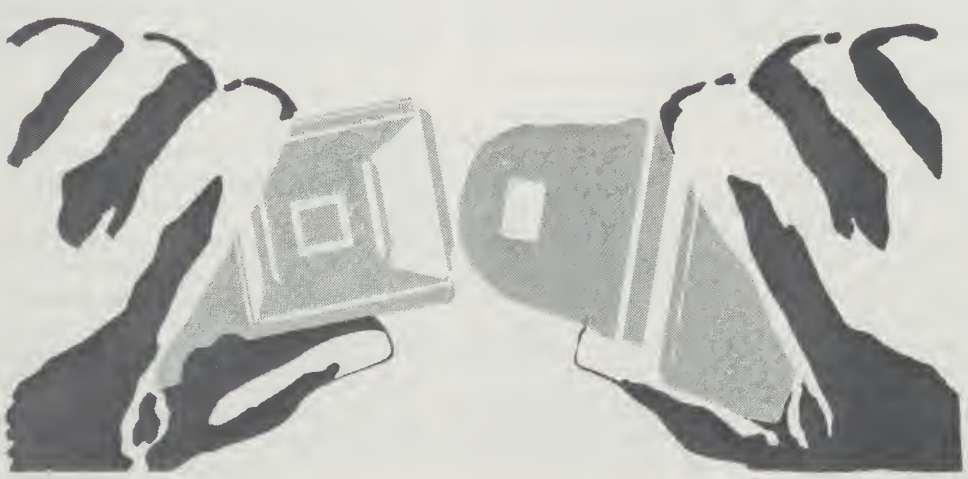
The United States may at last be moving toward mandatory seat belt laws. New York State established the first such law, effective January 1, 1985.[13] By the middle of 1985 thirteen more states had passed similar laws,[14] and the District of Columbia did so later in the year. However, almost all the state legislatures considered mandatory seat belt laws during 1985, and a number of states including Virginia rejected the proposed laws. More recently, the Maryland state legislature approved a mandatory seat belt law.[15] The U.S. Department of Transportation has ruled that air bags or automatic seat belts must be installed in all automobiles sold in the U.S. by 1989 unless states with two-thirds of the nation's population have passed mandatory seat belt laws by that time.[14] While this might appear to insure that most or all of the population soon will be adequately protected, previous efforts to require passive restraint systems for automobiles have been delayed repeatedly.[16] It remains to be seen whether the United States will enjoy the public health benefits of mandatory seat belt laws already demonstrated in Switzerland and many other countries.

Acknowledgment

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References

1. Gunby, P. "Medical News: Auto Seat Belt Use Declining." *JAMA* 243(1980):1703.
2. Jones, R.J. "Seat Belts and Safety." *JAMA* 246(1981):1660.
3. Dickenson, T.J. "Effectiveness of Shoulder Belts." *JAMA* 247(1982):1936–37.
4. Smith, R.P. "Use of Seat Belts." *JAMA* 248(1982):922.
5. O'Neill B.; Williams, A.F.; and Karpf, R.S. "Passenger Car Size and Seat Belt Use." *Am J Public Health* 73(1983):588–90.
6. "Time Needed to Fasten Seat Belt Worth 80 Cents a Trip, Drivers Say." *Am Med News*, March 22, 1985:29.
7. Hodson-Walker, N.J. "The Value of Safety Belts: A Review." *Can Med Assoc J* 102(1970):391–93.
8. Linsley, C. "Wear it!" *AAA World* 5(1985):9–10.
9. Office federal de la statistique. *Accidents de la circulation routiere en Suisse, 1981.* Bern: Office federal de la statistique, 1982.
10. Office federal de la statistique. *Accidents de la circulation routiere en Suisse, 1982.* Bern: Office federal de la statistique, 1983.
11. Luna, G.K.; Copass, M.K.; Oreskovich, M.R.; and Carrico, C.J. "The Role of Helmets in Reducing Head Injuries from Motorcycle Accidents: A Political or Medical Issue?" *Western J Med* 135(1981):89–92.
12. Sanders, R.S. and Dan, B.B. "Bless the Seats and the Children; the Physician and the Legislative Process. *JAMA* 252(1984):2613–14.
13. "Occupant Protection Update." *Preventive Med Newsletter* (Am Coll Prevent Med) 3(1985):5.
14. "State Legislation Concerning Use of Safety Belts—United States, 1985." *JAMA* 254(1985):1290–95.
15. *Annotated Code of Maryland.* Article—Transportation, Sections 24-412.3 and 27-106 (as amended and approved 13 May 1986).
16. Christoffel, T. "The Supreme Court and Air Bags." *Am J Public Health* 74(1984):269–70.



An Old Controversy with a New Twist . . .

Controversy over pertussis immunization has existed from its earliest use to the present and is reviewed in the article by Lange and Kreider on the next page. In April 1982 an NBC television program, "DPT: Vaccine Roulette," reactivated the vaccine controversy. This program purported to show that immunization against diphtheria, pertussis, and tetanus (DPT) carried significant risk to the patient. Although not based on objective evidence, the program was successful in creating public concern over the safety of DPT immunization. Short on objectivity and scientific fact but long on sensationalism and emotionalism, the program set in motion once again the controversy of risk versus benefit of DPT immunization, focusing particularly on the pertussis portion of the vaccine.

In 1974 similar controversy had been fomented in England that led to a marked reduction in pertussis immunization and, ultimately, to a decline in immunity with a resultant increase in clinical infection and an increase in mortality secondary to pertussis.[1] Studies have been done that clarify the risk versus benefit value of following the then existent—and current—recommendations for immunization against diphtheria, tetanus, and pertussis. These studies identified the risk of both minor and major reactions occurring with the use of the vaccine and identified the pertussis component of DPT to be the antigenic fraction primarily responsible for adverse reactions. These studies confirmed the benefit of DPT immunization over any potential risk and also confirmed its efficacy.[2–4] Despite these encouraging data, the use of the DPT vaccine has declined or has been modified.[5] Concurrently, the incidence of clinical pertussis has increased. In at least one study, inadequate immunization has been clearly documented to be related to the increased incidence of pertussis.[6]

But a new threat has arisen: litigation against physicians and drug manufacturers in the event of an adverse reaction to the vaccine.[7] This has led to a marked increase in the vaccine's cost that undoubtedly will increase the cost to the patient and well may lessen use. In addition, the fear of any reaction following administration of the vaccine may result in a deviation from the recommendations for its use. This applies particularly to an overinterpretation of contraindications to vaccine use. These contraindications to administration of DPT vaccine bear repeating: (1) presence of an acute febrile illness, (2) an evolving neurologic disease, and (3) previous severe reaction to DPT.

A reduction in the use of the vaccine or altering the recommended immunization schedule[8] will further reduce the level of immunization in the population and enhance the occurrence of clinical pertussis. This is a controversy of the moment that must not be ignored, even while the search goes on for a vaccine that provokes an excellent immune response with a minimum of side effects.

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References

1. Robinson, R.J. "The Whooping-cough Immunisation Controversy." *Arch Dis Child* 56(1981):577–80.
2. Cody, C.L.; Baraff, L.J.; Cherry, J.D.; *et al.* "Nature and Rates of Adverse Reactions Associated with DTP and DT Immunizations in Infants and Children." *Pediatrics* 68(1981):650–59.
3. Murphy, M.D.; Rasnack, J.; Dickson, H.D.; *et al.* "Evaluation of the Pertussis Components of Diphtheria-tetanus-pertussis Vaccine. *Pediatrics* 71(1983):200–204.
4. Broome, C.V. and Fraser, D.W. "Pertussis in the United States, 1979: A Look at Vaccine Efficacy." *J Infect Dis* 144(1981):187–90.
5. Cherry, J.D. "The Pertussis Epidemic in Oklahoma: A Warning for the Future." *Am J Dis Child* 140(1986):417–18.
6. Nkowane, B.M.; Wassilak, S.G.; McKee, P.A.; *et al.* "Pertussis Epidemic in Oklahoma: Difficulties in Preventing Transmission." *Am J Dis Child* 140(1986):433–37.
7. Hinman, A.R. "DTP Vaccine Litigation." *Am J Dis Child* 140(1986):528–30.
8. *Report of the Committee on Infectious Diseases (Red Book)*, ed. 19. Evanston, IL: American Academy of Pediatrics, 1982, p. 18.

Pertussis Immunization: Two Centuries of Controversy

W. ROBERT LANGE MD and SIDNEY D. KREIDER MD

John Archer, first graduate of the first medical school in the New World, appears to have been a pioneer in using whooping cough vaccine, having conceived strategies of use in the late 1700s and having implemented immunization practices within a few years of Jenner's experiments. Debate and skepticism about its use have persisted ever since. Throughout the nineteenth and early twentieth centuries, pertussis vaccine was regarded as an instrument of treatment rather than as a means of prevention. The contemporary pertussis controversy reflects concern over the rare neurotoxic reaction associated with immunization. Such complications have been reported since the current vaccine became available in the 1930s, but clinical use of and dispute over pertussis vaccine are historic.

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That contemporary medicine has been practiced in an era of concern and controversy related to pertussis vaccine is an understatement. Though vaccines in general occasionally have been viewed with skepticism by the profession and public alike, this one in particular has led many to question whether it might be safer to risk contracting the disease than to endanger one's health in getting protected against it.

Vaccines prepared from whole, killed organisms (such as pertussis) may on rare occasion produce neurologic reactions, including encephalopathy. While these untoward sequellae appear to have gleaned increased attention in recent years, such vaccine-related morbidity with the current available product was first reported as early as 1933.[1] Contention regarding pertussis immunization has involved a wide spectrum of issues and individuals.

While the risk-benefit argument still wages, the consensus overwhelmingly supports vaccine use although there are contraindications to receipt of diphtheria-pertussis-tetanus (DPT) vaccine suggested by both the Immunization Practices Advisory Committee of the U.S. Public Health Service and the Committee on Infectious Diseases of the American Academy of Pediatrics. The accompanying Table contrasts the prevalence of seizures, reversible encephalopathy, permanent brain damage, and death between pertussis immunization and pertussis illness. Clearly, immunization is the safer approach.

Despite persistent concerns, one point is clear: the vaccine is effective in dramatically reducing the incidence of one of the most contagious and serious of the infectious diseases. Prior to the availability of vaccination, pertussis caused as many deaths in the United States as all the other contagious diseases of children combined.[9] The incidence has decreased over 99 percent from a record high of 265,269 cases in 1934 to only 2,187 cases a half century later in 1984.[10] The 1990 health objectives for the nation call for less than 1,000 reported cases annually.

Origins of Whooping Cough Immunization

You aim high and miss, but it's better than not to aim at all (Louis W. Sauer).[11] The modern era of pertussis vaccination is said to have begun with Louis W. Sauer, the developer of the current vaccine, at Northwestern University Medical School in the early to mid-1930s.[11,12] However, immunization programs against this disease go back much further. Vaccination strategies against whooping cough (not yet referred to as pertussis) were being conceived in the late 1700s and were being implemented within a few short years of Jenner's epic experiments in 1796. The earliest use of whooping cough vaccine appears to be about 1800 to 1804 and is attributable to the talents of a rather remarkable individual.

The name John Archer comes to us over two centuries of history as the first graduate of the first medical school in the New World. He's the ancestor of the medical profession in the United States, honored for receiving a truly unique degree in 1768 from what is now the University of Pennsylvania's School of Medicine.[13] Archer was a true pioneer, who in addition to

Table. Prevalence of Neurotoxic Reactions and Death in Pertussis Immunization vs. Illness

	Pertussis	
Frequency of	**Immunization**	**Illness**
Transient seizures	1:1,750[2]	1:225[6]
Reversible encephalopathy	1:110,000[3]	1:4,000[6]
Permanent brain damage	1:310,000[4]	1:200[7]*
Death	1:1,000,000[5]†	1:50[8]–1:1,000[6]#

* Varies widely depending on definition.
† 29 deaths, 1960–1983.
Varies widely depending on patient age.

being this nation's first medical graduate, succeeded in numerous political accomplishments.

Dr. John Archer could represent every doctor. He was a citizen of his turbulent times: a revolution was fought and won, an infant government was formed and it prospered. John Archer, an early and leading Whig, had something to do with both.[13] He was a member of numerous independence committees as well as captain in a local militia unit. He was a signer of the Bush Declaration, forerunner of the Declaration of Independence, and he was a member of the convention that framed the Maryland Constitution and the Bill of Rights. Following the Revolution he was appointed a Commissioner of Peace of Harford County, Maryland, and was later a Judge of the Orphan's Court. In 1800 he was elected a member of Congress, and two years later he was re-elected. While a member of that body, the physicians of Washington and vicinity availed themselves of his professional advice in cases that had baffled their skill.[14]

Within the field of medicine, John Archer was equally active and innovative. In 1799, he and his son, Dr. Thomas Archer, helped establish Maryland's state medical society, the Medical and Chirurgical Faculty of Maryland, and he was the founder of the medical society in Harford County, where he lived.

To some extent, he was the pioneer of the concept of continuing medical education; for over a quarter of a century, physicians as well as medical students were regularly under his tutelage at his home, Medical Hall. In cases of fracture of the femur he contrived an apparatus that later became famous as "Physick's modification of Descult's apparatus," and this was long before it was ever applied by Dr. Physick.[14] Other original contributions to medicine by Dr. Archer were the introduction of *Polygala senega* (seneka snakeroot) as a remedy for croup, the success of which for many years was considered astonishing; and the implementation of the appropriate dosing regimen of Peruvian bark in the management of intermittent fever in order to prevent relapse. The frequency and duration of the treatment regimen proffered became a standard of care, although quinine, the active ingredient in the bark, later became the appropriate substitute.[15]



"Medical Hall," Bel Air, Maryland home of Dr. John Archer. M 1768

John Archer pioneered in the design and implementation of immunization practices, and he appears to have been the first to employ whooping cough vaccine,[13–16] a practice that was to prove to be as controversial then as it is now. While a member of Congress, Dr. Archer conducted a series of experiments in Georgetown that brought to light the interesting observation that vaccination, if performed in the early stage of whooping cough, "will so mitigate it that it can scarcely be recognized as a disease."[15] Such vaccination allegedly so modified the disease that "its course was rendered comparatively harmless, even in winter,"[14] and that it "might be treated as a trivial complaint."[13] Archer's practice was to administer whooping cough vaccine during the second or third week of illness, "when the symptoms were fully ascertained"; however, it could be administered sooner, "should the convulsive cough be violent."[17,18] His advocacy for vaccine use was so enthusiastic that he concluded: "thus of two formidable diseases, to which the human race are liable, small pox and hooping-cough, the first is prevented and the latter is cured."[17]

Even though Dr. Archer occasionally would write prolifically, one has to look elsewhere to learn more regarding whooping cough vaccine and immunization practice of the time.

Evolution of Pertussis Immunization

John Archer died in 1810 at his beloved Medical Hall estate. Fortunately the practice of whooping cough immunization did not die with him. That same year, Dr. John Crawford, the physician who had instituted smallpox vaccination in Baltimore in 1800, corroborated Archer's report that whooping cough immunization indeed does attenuate the course of the disease.[19]

All this transpired nearly a century before the Belgian investigators Bordet and Gengon discovered the responsible microbe in 1906. During the latter years of the nineteenth century enthusiasm for the vaccine treatment of pertussis waned. Even Bordet and Gengon were but mildly interested in immunization and went on record not advocating prophylactic vaccine use since "the disease itself seldom asumes a very serious type."[20]

Throughout the nineteenth and early twentieth centuries, customary practice was to immunize a patient during the early course of whooping cough illness in an effort to weaken the clinical course and abort its more life-threatening complications. Pre-exposure prophylaxis of susceptibles was not the standard of care, thus vaccines were considered an element of treatment rather than a means of prevention. These strategies were controversial from a number of perspectives, and they provoked a wide variety of debate.

The vaccines used, particularly in the early years of practice, were crude, generally consisting of purulent exudate from patients with active infection. Certainly in the first century of their use there was little standardization regarding the product used or the methodology for using it. The vaccine was administered percutaneously and later by injection as the technology evolved. Following advances in microbiology and the identification of the pertussis bacterium, different immunization approaches became available to the practicing physician. Autogenous vaccine was prepared and used by some physicians, but with time, vaccine products distributed by the larger pharmaceutical houses were employed more generally.[21] These products consisted of the intact organism responsible for causing the disease.

Soon physicians were faced with the decision of whether to employ pertussis vaccine alone or to use the so-called combined or polyvalent vaccines that contained not only the pertussis organism but also the other respiratory pathogens known at that time, namely pneumococcus, *Haemophilus* influenza bacillus, *Micrococcus* catarrhalis, *Streptococcus*, and *Staphylococcus*.[21] With time, a preference for this combined product became evident. Typical dosages, measured in number of bacteria, ranged from initial doses approximating 6,000,000 upward to 200,000,000+ per injection.[22]

As the controversy of what to use settled, disagreement became apparent concerning how much vaccine and how often it should be administered. From dosing regimens in excess of 1.25 billion organisms (12 injections) newer strategies evolved employing up to 25 billion organisms.[22,23] There was a consistent tendency over time for larger doses. Vaccine customarily was administered every other day until symptoms lessened, and then every 3 to 4 days for approximately two weeks.[22] Reports suggested an efficacy rate of 90 percent, as measured by a decrease in the number and severity of paroxysms, early cessation of vomiting, improved sleep patterns, and shortened course of the illness.[21] The duration of illness was said to decrease from a protracted course of one to four months to 20 to 25 days.[21] Vaccine side effects were regarded as being incidental and included transient temperature elevations to 101° F, restlessness, and temporary increases in the paroxysms of coughing.[23]

Preventive Use

Starting in 1914 and increasing over the next three years, vaccines began to be used prophylactically, particularly in institutional settings, and attack rates were reported to decrease from as high as 80 percent to approximately 7 percent.[24] Since it was thought that protection was short-lived (2 to 3 weeks), such vaccination programs generally were undertaken only in the face of a disease outbreak. Because vaccine inventories frequently were depleted during such epidemics, physicians again began formulating their own vaccine: avoiding saliva, a sample of thick tenacious material obtained from the bronchial tract of a patient with whooping cough was cultured; the resulting product then was used to induce an immunogenic response in others.[24] Though not always cultured and often difficult to grow, some culturing, particularly on certain mediums, attenuated the bacterium.[20] The employment of 1 percent formalin as an inactivating agent was a late development in the history of vaccine production.[1]

The shelf life of the prepared vaccine material became an issue as complement fixation methods began to demonstrate varying response rates based on the age of the product. Vaccine two to three months old evoked an immunogenic response in only 12.5 percent of recipients; that two to four weeks old in 25 to 75 percent; and freshly prepared product in 94 percent.[25,26] It soon became practice to administer vaccine material less than one week old.[26]

With the dawn of the current era of pertussis immunization and with the advent of antibiotic drugs, dissension and dissidence flourished regarding the use of vaccine preparations in the treatment of pertussis. While one faction was arguing that vaccine *therapy* in pertussis is rational and effective,[27] others were convinced that regardless of dosage, the vaccine not only had no curative effect but also did not lessen the severity of the disease.[28]

Whereas both circles may have been more in agreement concerning the prophylactic use of these vaccines, a more worrisome concern was being raised, one that could have shaken the foundations of both clinical and preventive medicine had it gained widespread acceptance. Antivaccination societies were springing up on both sides of the Atlantic, and these camps marched to widely varying drum beats. Some argued that improved sanitation, not vaccination, was the appropriate tactic to interrupt transmission of infectious disease. Whereas many recognized the importance of both approaches, a

vocal minority often advocated the exclusive use of but one. Of much greater concern, other dissenters, frequently of the Malthus nihilistic persuasion, argued a philosophy against vaccination of such scourges as smallpox and pertussis because they believed such diseases played a vital role in the natural order of this planet. Epidemics were considered necessary and merciful in order to avoid other less desirable fates such as starvation. Thus pertussis was perceived as an important modality of population control and an appropriate remedy to prevent mass global starvation. Fortunately, this argument was quickly laid to rest, otherwise it very well might have become the biggest controversy of all.

Acknowledgment

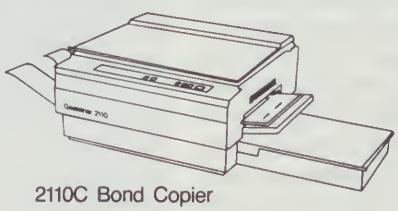
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References

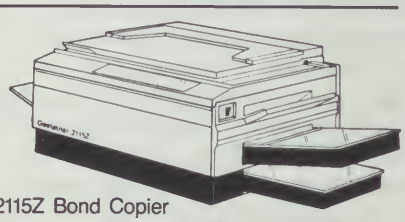
1. Madsen, T. "Vaccination Against Whooping Cough." *JAMA* 101(1933):187–88.
2. Cody, C.L.; Baraff, L.J; Cherry, J.D.; Marcy, S.M.; and Manclark, C.R. "Nature and Rates of Adverse Reactions Associated with DTP and DT Immunizations in Infants and Children." *Pediatrics* 68(1981):550–60.
3. Miller, D.L.; Ross, E.M.; Alderslade, R.; Bellman, M.H.; and Rawson, N.S. "Pertussis Immunization and Serious Acute Neurological Illness in Children." *Br Med J (Clin Res)* 282(1981):1595–99.
4. Hinman, A.R. "The Pertussis Vaccine Controversy." *Public Health Rep* 99(1984):255–59.
5. Corsellis, J.A.; Janota, I.; and Marshall, A.K. "Immunization against Whooping Cough: A Neuropathological Review." *Neuropathol Appl Neurobiol* 9(1983):261–70.
6. Miller, C.L. and Fletcher, W.B. "Severity of Notified Whooping Cough." *Br Med J* 1(1976):117–19.
7. Litvak, A.M.; Gibel, H.; Rosenthal, S.E.; and Rosenblatt, P. "Cerebral Complications in Pertussis." *J Pediatr* 32(1948):357–79.
8. Fulginiti, V.A. "Pertussis Disease, Vaccine, and Controversy." (editorial) *JAMA* 251(1984):251.
9. Smith, D.H. "Hemophilus Infections." Petersdorf, R.G.; Adams, R.D.; Braunwald, E.; Isselbacher, K.J.; Martin, J.B.; and Wilson, J.D., eds. *Harrison's Principles of Internal Medicine*, 10th ed. New York: McGraw Hill, 1983, p. 972.
10. CDC. "Pertussis-Washington, 1984." *MMWR* 34(1985):390–400.
11. Greenwood, R.D. "Louis W. Sauer—The Conqueror of Pertussis." *J Kans Med Soc* 76(1975):169–70.
12. Chase, A. *Magic Shots.* New York: William Morrow and Co, 1982, p. 391.
13. Davis, A.C., ed. "John Archer, MD, America's First Medical Graduate." *Medical Affairs* (J Univ Pennsylvania Sch Med) 1(1960):6–9.
14. Anon. "A biographical Sketch of John Archer, MB, by One of His Descendants." *Bull Johns Hopkins Hosp* 10(1899):141–47.
15. Anon. "A Biographical Sketch of John Archer, MD. Late of Maryland." *Med and Surg Reporter* 22(1870):129–31.
16. Bell, W.J. "An 18th Century American Medical Manuscript. The Clinical Notebook of John Archer, MB, 1768." *Library Chronicles* 22(1956):1–8.
17. Archer, J. "The Hooping-cough Cured by Vaccination." *Medical Repository* 12(1808-9):182–83.
18. Archer, J. "Archer's Explanation of the Currative Powers of Vaccination in Hooping-cough. *Medical Repository* 12(1808-9):304.
19. Cordell, E.F. *The Medical Annals of Maryland, 1799–1899.* Baltimore: Williams and Wilkins, 1903, p. 677.
20. Bordet, P. "The Microbe of Whooping Cough." *Br Med J* 2(1909):1062–64.
21. Cheney, H.W. "Vaccines in Pertussis." *Illinois Med J* 32(1917):94–97.
22. Bloom, C.J. "Vaccin Treatment of Whooping Cough." *New Orleans Med Surg J* 69(1916):200–205.
23. Bloom, C.J. "Vaccin Treatment of Whooping Cough. (Additional Observations)." *New Orleans Med Surg J* 70(1917-18):275–82.
24. Shaw H.L.K. "The Treatment of Whooping Cough." *NY State J Med* 18(1918):18–21.
25. Huenekens, E.J. "Pertussis Vaccine Controlled by the Complement Fixation Test." *NY Med J* 107(1918):1147–48.
26. Huenekens, E.J. "Further Report in the Use of Pertussis Vaccine Controlled by the Complement Fixation Test." *Am J Dis Child* 16(1918):30–33.
27. Bloom, C.J. "Vaccine Therapy—The Most Rational and Effective Method of Treating Whooping Cough." *Arch Pediatr* 36(1919):1–27.
28. Barenberg, L.H. "The Currative and Prophylactic Value of Vaccines in Pertussis." *Am J Dis Child* 16(1918):23–29.

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Treating Atypical Psychiatric Disorders with Anticonvulsants

RUSSELL R. MONROE MD

Recent reports on the clinical efficacy of the anticonvulsant carbamazepine (Tegretol) in treating atypical psychiatric disorders raise the issue of whether an unrecognized ictal mechanism is present in such syndromes. Five patients treated with a variety of anticonvulsants and followed over 2 to 23 years support such an hypothesis. These cases illustrate that when anticonvulsants are discontinued or the dose is reduced to subtherapeutic levels, symptoms return and that drug regimens that do not raise seizural thresholds are ineffective or exacerbate the symptoms. That these patients do not or only rarely have typical epileptic seizures and that electroencephalogram abnormalities are minimal or require drug activation obscure the proper diagnosis. However, epileptoid prodromes and auras as well as the paroxysmal or episodic course, suggesting an ictal mechanism behind the illness, indicate the proper drug regimen.

Dr. Monroe is Professor of Psychiatry, University of Maryland School of Medicine, Baltimore.

As early as 1959 the author reported many psychiatric syndromes were related to an ictal phenomenon in the limbic system often not reflected in the routine electroencephalogram even though storms of neuronal activity were recorded deep in the brain.[1] This suggested that an anticonvulsant regimen might be effective in treating such disorders.[2] During the intervening years evidence has mounted supporting this hypothesis and culminating in the recent reports that the anticonvulsant carbamazepine (Tegretol) was particularly effective in treating certain atypical manias and depressions.[3]

It is now apparent that anticonvulsants are effective in other disorders such as atypical schizophrenia, intermittent explosive disorders, panic reactions, hyperactivity, and withdrawal syndromes.[4] Their effectiveness in a wide range of psychopathology has expanded our pharmacologic treatment of diverse psychiatric syndromes. These findings are pertinent to the clinician because patients who respond to anticonvulsants usually have failed to respond with more conventional pharmacologic regimens, whether lithium, antipsychotics, or tricyclic antidepressants.

The anticonvulsant responders usually are characterized by an abrupt onset of their symptoms with an equally rapid remission. They also complain of prodromals or auras similar to patients with grand mal or psychomotor seizures and demonstrate other symptoms suggesting formes frustes of epilepsy.[5] Despite these epileptiform symptoms, patients seldom report typical grand mal, petit mal, or simple focal seizures. Perhaps this is why neither psychiatrist nor neurologist consider the possibility of complex partial (focal) seizures in their diagnostic evaluations. Several vignettes with follow-ups emphasize the effectiveness of a pharmacologic regimen with drugs that raise seizural thresholds.

Case 1 Controlled by Primidone (Mysoline)

A 41-year-old lawyer was admitted (with a diagnosis of manic depressive psychosis) to a private sanitarium in November 1963. Immediately preceding this he had been hospitalized for injuries following an automobile accident that in reality had been a suicide attempt. He intentionally had driven into a bridge abutment at high speed. While in the hospital he received electroconvulsive therapy (ECT). His depression lessened, but gradual paranoid delusions followed. ECT was continued to treat his paranoia, despite increasing recent memory loss, until the last week of March 1964 when he suddenly became confused and developed rigidity in all extremities as well as occasional athetoid movements. He was transferred to University Hospital for neuropsychiatric evaluation.

Although this was his first psychiatric hospitalization, a careful medical history revealed cyclothymic mood swings with frequent hospitalizations for physical complaints that were obvious depressive equivalents. On one of the hospitalizations he had several normal electroencephalograms (EEG), but one revealed scattered hypersynchrony most prominent in the left anterior and mid temporal region. He had a childhood history of head injury followed by several psychomotor seizures. Questioning the patient and his family revealed there were atypical aspects to his manic depressive episodes in that many, although very intense, were quite short, abrupt in onset, sometimes lasting only a few hours, and often preceded by an aura of being engulfed by flames or inundated by waves. Before this hospitalization, hypomanic episodes were considered characterologic rather than symptomatic: most people believed he was unusually energetic or productive, although those closest to him recognized his bizarre, inappropriate behavior.

Ten days after stopping ECT, the rigidity and athetoid movements had abated and his recent memory was improving slowly. He was placed on phenytoin (Dilan-

tin) but responded with toxic symptoms at relatively low doses so was shifted to primidone (Mysoline) 250 mg q.i.d. and was discharged on this regimen May 23, 1963.

He was followed weekly for the first year after discharge. He reported mild transitory ups and downs in his moods and was encouraged to control this by a flexible drug regimen. He ultimately evolved a schedule of 500 mg, q.i.d. and then discovered by taking all medication at night he could avoid drowsiness during the day. He has maintained this regimen with minimal follow-up for over 20 years. Mood swings have been rare and attenuated, and he has functioned exceptionally well as a husband, father, lawyer, and pillar of the community without incapacitating symptoms. Periodic attempts to reduce medication lead to exacerbation of his mood swings, but these were corrected by resuming this regime. By current diagnostic standards the rapid cyclic manic and depressive behavior would have suggested the diagnosis of Atypical Bipolar Disorder (DSM III 296.70) while the neurologic diagnosis would be Complex Partial Seizures.

Case 2 Controlled by Phenytoin (Dilantin) and/or Phenobarbital

In December 1968, a 48-year-old housewife was admitted for the first time to a psychiatric hospital. She had been well adjusted until 1963 when her third child died at the age of 3 weeks. This was followed by a short period of depression. There was another period of depression in 1966 when her husband had a serious heart attack, a third when the family moved in 1968, and a fourth shortly before admission when her older son married. Because of physiologic symptoms (agitation, insomnia, and weight loss) the diagnosis in 1968 was Major Affective Disorder, depressed type or if previous depressive episodes were considered insignificant Involuntional Melancholia (DSM II Codes). She was started on nortriptyline (Aventyl) 25 mg q.i.d. On the third day on the medication, she had her first grand mal seizure.

Careful re-evaluation of her medical history revealed a number of atypical features: transitory episodic symptoms lasting for a few hours to a few days including strange feelings of alienation and depersonalization, as well as physiologic phenomenon suggesting an aura, such as sudden flushing, perspiration, prickling sensation, and brief outbursts of verbal aggression, particularly during the premenstrual period (menopause did not occur until five years later). Her husband reported episodes when she seemed confused and glassy eyed; she was amnesic for these episodes. A routine electroencephalogram revealed anterior temporal spikes on the left and rarely independent spikes in the right temporal area. The regimen was changed to phenytoin and diazepam, resulting in a rapid improvement in her condition. She was discharged 10 days later to be followed on an outpatient basis. Three months later she took an overdose of these drugs, a suicidal event precipitated by a stormy period in her marriage. Again, she was admitted to the hospital, and it was discovered she had discontinued her anticonvulsant regimen two weeks before hospitalization. The day following her admission she had a second and last grand mal seizure. She was restarted on an anticonvulsant regimen including phenytoin (Dilantin) 100 mg q.i.d. and 20 mg of phenobarbital t.i.d.

She continued this regimen for the next 15 years without further seizures or hospitalization, but maintained psychotherapeutic sessions—first weekly and then monthly for five years. Thereafter she was followed twice per year. During this period she worked first as a full-time secretary and then as a research assistant. She went through numerous stresses including her husband's severe heart attack, death of her mother, and many problems with her children who were now young adults. Such stressors elicited mood swings and characteristic physiologic symptoms described above, but hospitalization was not necessary, and there were no further suicidal threats.

In the fall of 1983 she called to report weakness, nausea, dizziness, and "bruising easily." As she had not had a general medical evaluation for a year she was referred to her internist who could find no significant illness. Interview with her psychiatrist revealed that the staggering gait was associated with bumping in to furniture and falling down, hence her bruising. Nystagmus was noted. Serum phenytoin level was 22 μg per mL; this was reduced from 400 to 200 mg per day. Toxicity was relieved, but episodic depression returned. In an attempt to shift from a phenytoin regimen she was placed on carbamazepine (Tegretol) starting with 200 mg per day. The depression remitted, and for the past year on a regimen of 200 mg phenytoin, 200 mg carbamazepine, and 60 to 90 mg of phenobarbital, there has been no recurrence in her symptoms. Serum levels revealed that both the carbamazepine and phenytoin were subtherapeutic although the phenobarbital was well into the therapeutic range. Her symptoms may be controlled by phenobarbital alone, but because she is doing well she is reluctant to change her anticonvulsant regimen.

This patient illustrates that symptoms suggestive of complex partial seizures were only elicited after she had a typical grand mal seizure and was then questioned regarding prodromals, auras, and formes frustes of epilepsy. The psychiatric diagnosis was changed to Atypi-

cal Depression (DSM III 298.82), while the neurologic diagnosis was Complex Partial Seizures.

Case 3 Controlled by Valproate (Depakene)

First hospitalized for depression in September 1982, a 20-year-old single male was subsequently treated with imipramine, lithium, and haloperidol without significant improvement in his symptoms; he was re-hospitalized in September 1983. Even more disconcerting (at least to the community) than the depression, was his explosive behavior. He was daring, well coordinated, and liked to take risks while driving, skiing, and mountain climbing. His second hospitalization was precipitated by a brutal, explosive attack on his girlfriend when she refused a reconciliation. The previous night, during a family argument, he had physically attacked his father and brother. Between outbursts he was a sweet and kindly young man who related easily to friends and strangers and worked conscientiously in the family business.

Depression, the major problem for the patient, often occurs inexplicably with a precipitous onset and may last only a few minutes or hours or persist for several weeks to a month. This dysphoria is so intense that it leads to thoughts of suicide. Such dysphoric feelings were in marked contrast to his tolerance for physical pain. During the second hospitalization an alpha chloralose activated EEG revealed generalized high amplitude Delta-Theta activity.

The patient developed a skin rash, episodic anxiety, tachycardia, as well as sleeplessness on carbamazepine so was shifted to primidone (Mysoline) 750 mg per day. He was discharged after one month and during follow-up showed considerable improvement in both his episodic dysphoria and intermittent explosive behavior. In January 1984, however, after becoming suicidal, he was forced into the hospital where he explosively and without provocation broke the jaw of an attendant. Since his primidone and phenobarbital levels were below therapeutic range, his medication was increased to 1250 mg primidone per day. His symptoms immediately faded on this regimen and, striking a bargain with his psychiatrist, agreed to minimal length of hospitalization and to keep the physician informed regarding increases in prodromal symptoms so the medication could be adjusted or changed.

His explosive behavior continued but now was limited to his brother and a new girlfriend. His family described him as like a "caged animal" and said he was flushed, grinding his teeth, and glassy eyed. He objected to his drowsiness and lethargy and became self-derogatory regarding this "laziness." As bargained, he accepted re-hospitalization in March at which time his primidone level was low (5.0 μg per mL) and phenobarbital high (30 μg per mL). He was shifted to valproate (Depakene) and discharged two weeks later on 1000 mg per day. Follow-up 30 months later revealed his depressions are minor, transitory, and obviously correlated to life events. His aggression is rare and verbal rather than physical, although he continues to engage in barroom brawls with strangers who challenge or provoke him.

Neurologic consultants did not believe the symptoms reported by the patient and family suggested an ictal process. However, the dramatic response to anticonvulsants and lack of response to other psychotropic agents is strong (if circumstantial) evidence for a limbic ictus as the underlying mechanism for his disorder. Psychiatric diagnoses were Atypical Depression and Intermittent Explosive Disorder (DSM III 312.34), while his neurologic disorder was Complex Partial Seizures.

Case 4 Controlled by Carbamazepine (Tegretol)

A 41-year-old artist was evaluated and treated on an outpatient basis. The presenting complaint were periods, lasting for several hours to several weeks, marked by a decided change in his usual affable personality. During these episodes he was depressed, angry, and irritable. They often were preceded by a vacant stare and minor confusional symptoms. He would be intolerant of other people's foibles and irrational and circular in his reasoning. This would occur abruptly, disappearing almost as rapidly. Anyone trying to be supportive during such episodes risked an angry confrontation that usually was verbal, although at times he struck his wife and drove in a dangerous manner. There was a distinct paranoid tinge to his reasoning and he reported cloudy memory during these episodes and an inability to recall details.

A number of complaints suggested a formes frustes of epilepsy, particularly his intolerance of florescent lights (because of their flickering quality) and sometimes dizziness and ataxia when walking quickly over patterned rugs (flickering sensations in his peripheral visual fields). The patient consulted a professor of neurology at a medical school in his community who, aware of research supporting the correlation between explosive behavior and a limbic ictus referred the patient to me for further diagnostic procedures and recommendations for treatment.

An alpha chloralose activated EEG revealed paroxysms of high amplitude generalized Theta-Delta activity, particularly during the hyperventilation and intermittently in the prehyperventilation and posthyperventilation epochs. Evidence suggested a left tem-

poral focus for this slow activity. There was some evidence for minimal brain damage in that he lacks binocular vision, has almost no mechanical aptitude or mathematical capacity, and has difficulty interpreting maps.

He was placed on a regimen of 800 mg carbamazepine (Tegretol) per day and within a week reported dramatic changes in his dysphoria and intermittent rages. This was confirmed by his wife. His paranoid thinking and confusion completely disappeared; he was ecstatic about his newly acquired composure. Follow-up two years later revealed this improvement persists. His psychiatric diagnosis is Intermittent Explosive Disorder and neurologic diagnosis Complex Partial Seizures.

Case 5 Control but a Treatment Failure

In August 1983, a 44-year-old married male was referred by his internist because of explosive behavior, particularly directed toward his spouse. They had attempted marriage counseling but without much success. His volatile behavior was noticed at the time of their marriage 20 years before, but according to his wife it had been almost unbearable the past four years. At that time he quit his job and opened his own business, but this had not flourished, largely because of his "prickly" character.

The patient saw the marital problem as incompatibility, but a trial separation lasted only a few days before he returned. His wife was less concerned about his occasional physical attacks on her than about his cognitive impairment during such attacks. She described this as confusion and forgetfulness (something he completely denied), but she believed this was interfering with his work and, indirectly, threatening her financial security. Further, she was upset that his argumentative and explosive behavior was alienating their friends. Other mood swings were apparent, particularly depression and lethargy associated with difficulty in sleeping.

A thorough medical work-up revealed no significant illness except that the alpha chloralose activated EEG showed generalized high amplitude Theta-Delta activity that was interpreted as nonspecific response but nonetheless correlates to a high degree with the dyscontrol syndrome. He was started on carbamazepine, but even at low doses he complained of side effects such as lethargy and dizziness. He was shifted to phenytoin 200 mg per day and scheduled for weekly marital counseling. Within two weeks his wife reported significant changes in his behavior: he had become much less irritable and argumentative. This also was noticed by friends not aware of his medical regimen. However, in the patient's view he had become lethargic and depressed. His wife confirmed that he seemed subdued and presented a sad demeanor, but she added his forgetfulness and confusion had subsided also. Inasmuch as the patient never would admit to these symptoms, he thought his wife's statements were just another "put down."

Because the patient wanted to stop his regimen, it was negotiated that he should do so for the next month then take his medication to test whether he was being helped. This maneuver might convince him of the value of his regimen (that is, if his wife's observations were correct). This experiment was concluded with similar results from the wife's point of view, but as the patient still was unconvinced, he terminated his treatment. It seemed that being relaxed and nonconfrontational was a threat to his esteem, while being argumentative and even rageful restored this esteem and avoided depressive concerns about his failures. Psychiatric diagnosis was Intermittent Explosive Disorder and neurologic diagnosis Complex Partial Seizures.

Summary

The common characteristic of these episodic disorders are acute onset; equally abrupt remission; intense angry, fearful, or depressed emotions; and surprisingly, often a relatively stable behavioral pattern between episodes. Many other symptoms may be present, but if they are, they can lead to an erroneous diagnosis.[5] These are hallucinations and delusions (leading to the incorrect diagnosis of schizophrenia); illusions and clouded sensorium (erroneously diagnosed as drug induced delirium); hyper- or hypoactive behavior with racing thoughts and/or insomnia (pointing falsely to manic-depressive disorders); and impulsive aggressive acts (erroneously considered typical antisocial behavior). Frequently there are multiple physical complaints, often mistaken for hypochrondrical or conversion symptoms although close inspection reveals actual physiologic imbalances.

The astute clinician may identify formes frustes of epilepsy, but in the absence of EEG abnormalities and the lack of typical seizures, this diagnosis is rejected. However, the negative EEG findings may reflect only the "bluntness" of the EEG as a diagnostic instrument inasmuch as patients with chronically implanted subcortical electrodes reveal that storms of electrical activity can occur in subcortical areas without any evidence of such on routine scalp recordings. For this reason, I recommend a drug activation of the EEG to reduce false-negatives. Subcortical recordings reveal the focus of excessive neuronal discharges in the limbic system is usualy limited to the hippocampus and amygdala.[6] This explains the absence of more typical epileptic attacks in these patients and the lack of EEG abnor-

malities in the scalp recordings. There is no official label for these disorders in either the international or American diagnostic codes, although I have suggested the rather cumbersome label of Episodic Behavioral Disorders.[7] Until there is such a code, multiple diagnoses are necessary.

As mentioned, the heuristic value of this orientation for the clinician is that these patients either fail to respond or their illness may be exacerbated with the usual psychotropic medications, while they do respond dramatically to an anticonvulsant regimen.

References

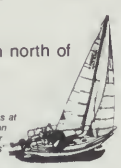
1. Monroe, R.R. "Episodic Behavioral Disorders—Schizophrenia or Epilepsy." *Arch Gen Psychiatry* 1(1959):205–14.
2. Monroe, R.R. "Anticonvulsants in the Treatment of Aggression." *J Nerv Ment Dis* 160(1975):119–26.
3. Post, R.M. and Uhde, T.W. "Are the Psychotropic Effects of Carbamazepine in Manic-depressive Illness Mediated through the Limbic System?" *Psychtr J Univ Ottawa* 10(1985):4, 205–19.
4. Birkhimer, L.J.; Curtis, J.L.; and Jann, M.W. "Use of Carbamazepine in Psychiatric Disorders." *Clinical Pharm* 4(1985):425–34.
5. Monroe, R.R. "Limbic Ictus and Atypical Psychoses." *J Nerv Ment Dis* 170(1982):711–16.
6. Monroe, R.R. "Correlation of Subcortical Recordings and Behavior." *Electroencephalogr Clin Neurophysiol* 8(1956):530–31.
7. Monroe, R.R. *Episodic Behavioral Disorders*. Cambridge, MA: Harvard University Press, 1970.



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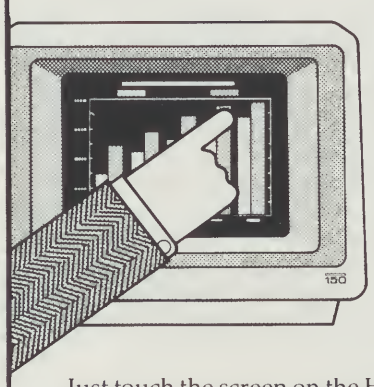
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HEWLETT PACKARD

A Lesson in History

Mrs. Charles Williams (Margaret), a Founder and Past-President of the Auxiliary to the Baltimore County Medical Association and Past-President of the Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland, presented her remembrances to a meeting of the Baltimore County Auxiliary honoring her as its first President.

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I want to thank you for inviting me; it was the nicest thing you could have done for your first President. I always have felt the Auxiliary to the Baltimore County Medical Association was my baby!

To put into perspective the times of the founding of our auxiliaries: the AMA Auxiliary was founded in 1922, the outgrowth of state and county auxiliaries of Oklahoma, Texas, Maine, Minnesota, and Montana. Mrs. Samuel Clark Red of Houston was President from 1922 to 1925. The Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland was founded in 1949 by Mrs. Thomas Christensen as first President.

Because no minutes are available of the founding of the Baltimore County Auxiliary, all of my remarks will be as I recall after 35 years.

My husband was discharged from the U.S. Army in October 1946 following World War II. He had joined the AMA and Med-Chi in 1942 after medical school graduation and the Baltimore County Medical Association in 1946 when we located in the county. In 1949 when Med-Chi was organizing their auxiliary, my husband, Dr. Williams, made a motion at a county medical meeting that a county auxiliary be formed. This motion was defeated. Wilmer Gallager MD of Catonsville and President at the time suggested that Dr. Williams bring up the motion in a year or so. When this was done in 1950, I think Dr. Gallager backed Dr. Williams' motion as the Association appointed Mrs. Gallager and me to form an auxiliary. Mrs. Gallager suggested that I do the organizing and she would have a Tea at her house for the organizational meeting.

Thirty-five years ago, Teas were the very nice way for ladies to meet. At that time the doctors' wives didn't know each other either county or statewide unless, of course, they were personal friends or wives of referring physicians. I knew only several wives myself, none very well. You must remember things were different: few of us could drive, even fewer had personal cars. There were no beltways, only a maze of streets to get you from one location to another. This was very time consuming. It took me 55 minutes to get here today from Pasadena, 35 years ago it might have taken three times as long. There were no copying machines, and (as it should have been) all invitations to the Tea were written by hand. About 18 ladies attended a very handsome Tea at the Gallagers. I had done my politics, and after proper motions, the group agreed to organize an auxiliary with me as Chairman, pro tem. Acting as all four officers and using Robert's Rules, I proceeded to bring this assignment to fulfillment.

I had talked to Mrs. Martin Strobel at the Tea and learned she had been secretary to Dr. Chesney, Dean at Johns Hopkins University Medical School, and since I had been secretary to Dr. Wylie, Dean at University of Maryland Medical School, we developed a great rapport, which continues to this day. I asked her to write the Bylaws using AMA and Med-Chi documents as a guide. Mrs. Strobel and Mrs. Caples (both from Reisterstown) asked if they could host the following meeting with Mrs. Saffell, another doctor's wife in the area. They did. I appointed a number of committee chairmen and met several times at luncheons at my house. At the next auxiliary meeting, we adopted the Bylaws, officers were elected, and we have been a working organization since.

The first year we addressed the problems of that time: (1) nurse shortage, (2) socialized medicine, (3) Social Security for MDs, and (4) most important—to support the Medical Society in any way they wanted us to. The Nursing Chairman was appointed immediately, and using the University of Maryland Medical Admissions procedure we outlined our process to select recipients and planned a fund-raiser for a scholarship.

The way of practice to this present time, I believe, is the direct result of the work the Auxiliary has done to keep the freedom of choice in medicine. As you know, many plans are in the offing to change private practice today. We did a vigorous public relations program for medicine. We sponsored a meeting on civil defense. We had nationally known speakers and a catered luncheon with coffee breaks just like they do today.

We planned a booth at the Timonium Fair. Talk about being ahead of the times: we had free blood pressures taken by the University of Maryland Nursing School. We hauled all the chairs from Med-Chi, borrowed a large tent from the Army, and had the local fire department hook up the electricity. We had an AMA film on the "Story of a Teenage Dope Addict." Imagine this subject 35 years ago and also a film on the discovery of insulin and the need for animals in research. About 14,000 pieces of literature were distributed, and approximately 5,000 people saw the films for the first three days. Then, the police closed us down: they didn't like the film on drugs. I was scared to death. Just a year before the doctors had voted not to have an auxiliary, and one year later I was in charge of this. However, both AMA and Med-Chi backed us, but by then the Fair was over. What an experience.

Two years later when I served as President of the Auxiliary to the Medical and Chirurgical Faculty of the

Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland. Mrs. Nancy Howell, President; Mrs. Helen M. Reichel, Editor.

State of Maryland, I took with me all the ideas of this Auxiliary and made them statewide. So you see, the first auxilians planned the groundwork that you carry on today. I'm very proud of all the work Baltimore County has been doing.

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Of tremendous interest, looking back, are the following excerpts reprinted from the *Maryland State Medical Journal*, December 1953. These excerpts are from the Annual Meeting of the Medical and Chirurgical Faculty of Maryland held in Osler Hall on April 29, 1953.

Dr. Maurice C. Pincoffs: "I turn to Mrs. Williams who is this year the very efficient, energetic, and able President of the Woman's Auxiliary of the Medical and Chirurgical Faculty, Mrs. Williams."

Remarks of Mrs. Charles H. Williams

Mrs. Charles H. Williams: "To the Faculty, my sincerest thanks for the lovely flowers I am wearing this evening.

"When my oldest son was just four years old, his Sunday School teacher was very discouraged with his unnecessary activity in her class. One day while she was giving out her Bible leaflets, my son kept jumping up and down yelling for his copy. In desperation she started on a little lecture just for him. She ended this by saying: 'John, please can't you learn to wait? You just must learn patience. Don't you know what patience is?' 'Oh yes,' my son explained very quickly, 'sick people.' I hope you will have a little patience with me, tonight, because I simply must review some of the highlights of your Auxiliary year.

"Our Auxiliary, in an effort to get out the votes, joined the Ballot Battalion, a nonpartisan group. We organized baby-sitting centers in doctors' offices and churches all over the city. One of our counties took care of telephone calls for their entire area for all information and service during the election day. Recently we were notified that our work helped the battalion win a major award in a contest sponsored by the American Heritage Foundation.

"The booklet *Winning Ways With Patients* was placed in many business offices and high schools for training secretaries and receptionists. Four of our counties sponsored Health Exhibits at Fairs. Medical literature was given out to thousands. We have worked on civil defense, cancer, and medical research programs.

"A resolution to honor the physician successfully passed our legislature and most county physicians were honored in some way.

"Future nurses clubs were organized in many schools. We helped various other groups obtain medical films for their programs. All of our organized counties now have nursing scholarships, and one county had to cut theirs in half because the award was won by twin sisters. High schools were visited and hospital tours conducted. A nurse recruitment film is being made of our nursing schools at a cost of Twenty-Five Hundred Dollars. The fund for this was made up from contributions. A reception was held to honor the nurses in practice. Various things were done for nurses' homes, such as the purchase of television sets. One county now gives an award to the nurse graduating with distinguished all-around efficiency.

"On May 12th, this year, the first Future Nurses Convention in the United States will be held here in this hall. This is a scientific session modeled after the doctors convention, with films and outstanding speakers. Already we have almost four hundred written reservations for girls who are interested in nursing to attend this affair.

"Last but not least we supported both of our Medical Schools by contributing to the American Medical Education Fund, and, of course, you all enjoyed the wonderful President's Ball on Monday evening.

"To our new President, Mrs. John G. Ball, I would like to leave a story my father repeated often to me when I was a youngster, of the two frogs that fell in a cream pitcher. One kicked a little bit and then sank to the bottom, while the other kept kicking and the first thing it knew it was floating around the top, on a ball of butter. Thank you."

Dr. Pincoffs: "I have another pleasant duty, Mrs. Williams, and that is to present to you these flowers and to read this letter which I should also like to read to the audience. It comes from and it is signed by the President of the Baltimore County Medical Association and is addressed to Mrs. Williams:

> We in Baltimore County are proud to have had you as the President of the Ladies Auxiliary of the Baltimore County Medical Association. We are further complimented that you were selected to fill the Presidency of the Ladies Auxiliary of the Medical and Chirurgical Faculty of Maryland. It is therefore a very genuine 'well done' you have earned, and now we wish to express to you our appreciation and best wishes. (APPLAUSE)"

***CAROL ALLEN*, President**
Auxiliary to the
Baltimore County Medical Association

Carol Allen, President of the Baltimore County Medical Association Auxiliary, recently presented a check to Pat Smith, who represents the Michael Rogers Fund. Michael is a seven-year-old Dundalk boy who underwent a liver transplant last November. The Auxiliary raised over $600 for this fund through an auction and a holiday sharing card.

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Justice Costs Exceed Plaintiffs' Compensation

According to a study of federal and state courts of general jurisdiction, compensation to plaintiffs in 1984–1985 was between $13 billion and $16 billion, while "transaction costs"—including plaintiffs' attorney fees, defense legal fees, public expenditures, and the value of the litigants' time—were between $17.6 billion and $25 billion. Conducted by the Rand Corporation's Institute for Civil Justice, the study only considered actual court awards and did not consider subsequent appeals or pretrial settlements.

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Cause of Malpractice Insurance Rate Increases Debated

The Association of Trial Lawyers of America (ATLA) has denied that a "malpractice insurance crisis" exists. Instead, ATLA blames physician negligence for the rise in claims and awards and blames the insurance industry for the rise in malpractice insurance rates.

In rebuttal, the American Medical Association (AMA) believes the crisis does exist and is due, in large part, to problems in the U.S. legal system. According to the AMA, the average award in malpractice cases jumped from $94,947 in 1975 to $338,463 in 1984. The AMA noted that large awards have increased insurance premiums for all physicians by 44.8 percent over the last two years.

• • •

New York System Close to Bankruptcy

According to court documents, the medical malpractice insurance business in New York is all but insolvent. One major writer has a deficit ranging between $1.1 billion and $1.7 billion, and another smaller company's deficits are between $200 million and $300 million. The figures came to light during hearings after the New York State Department of Insurance disapproved a request for a 76 percent rate increase from the Medical Malpractice Insurance Association, a joint underwriting venture of all liability companies licensed to do business in the state, and a request for a 57 percent rate increase from the doctor-owned Medical Liability Mutual Insurance Company.

• • •

$5.75 Million Awarded after Mistaken Diagnosis

A federal court jury has ordered a physician and a Washington, DC hospital to pay $5.75 million to a 22-year-old college student who is now a quadraplegic and requires around-the-clock care. Attorneys for the plaintiff argued that between 1969 and 1971, the physician and the hospital made a mistaken diagnosis of cerebral palsy. In late 1971, physicians at Johns Hopkins University Hospital found the patient was suffering from a spinal cord tumor.

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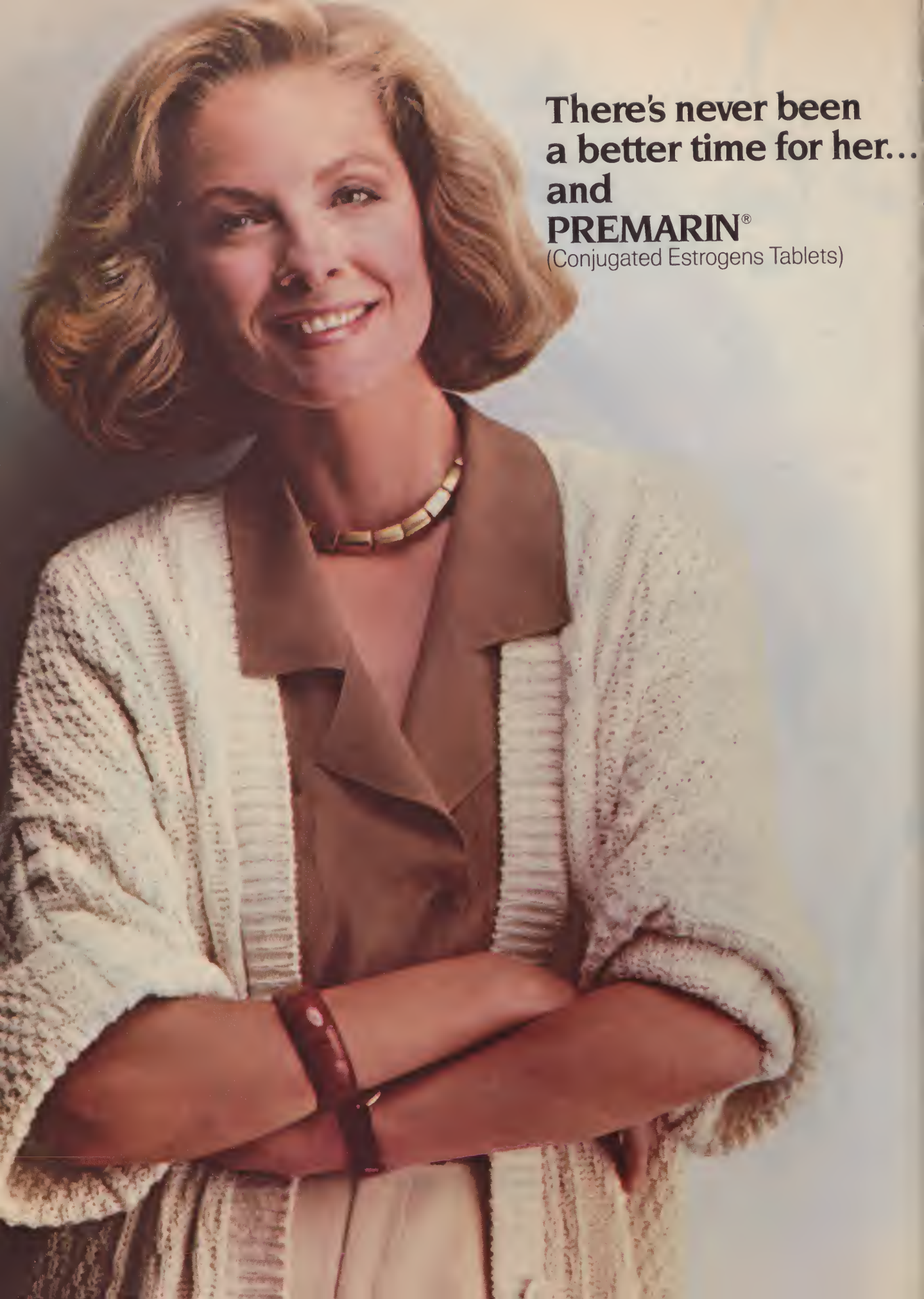
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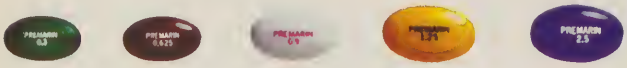
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PREMARIN® Brand of conjugated estrogens tablets, USP
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1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g. Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605 **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. 3. Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985; 67: 496-499. **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983,1:1,41-52. **5.** Barnes RB, Roy S, Lobo RA: Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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New Concepts in the Management of Thyroid Nodules

WILLIAM A. VALENTE MD and ALBERTO SEIGUER MD

Carcinoma of the thyroid gland is an unusual clinical problem that rarely contributes to death of a person. In contrast, structural abnormalities of the thyroid are common and present diagnostic challenges to practitioners. Those thyroid lesions representing a real risk for the patient often can be identified and managed to a satisfactory outcome.

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Thyroid nodules are common, the prevalence varying with the sex and age of the population, but a general occurrence rate of 6.4 percent in women and 1.6 percent in men was noted in the Framingham, Massachusetts study.[1] In an often quoted study done at the Mayo Clinic, 1,000 consecutive autopsies on patients with clinically normal thyroid glands disclosed that 50 percent of the glands contained nodules. Approximately three-fourths were multinodular glands, and 2 percent contained thyroid cancer unrelated to the cause of death.[2]

The incidence of cancer in thyroid nodules varies widely. In multiple surgical series, thyroid cancer was detected in 3 to 25 percent of resected thyroid nodules depending on referral patterns, selection criteria, and practice style. In general, 10 to 15 percent of patients operated on for a thyroid nodule will prove to have thyroid carcinoma on pathologic examination of the surgical specimen. Not infrequently, the thyroid carcinoma will be located in a different area of the surgical specimen than the nodule of initial concern. This probably reflects the unsuspected high frequency of multinodular goiters in solitary nodule patients.

There also is wide variation in the frequency of thyroid cancer in normal persons, as shown from autopsy series. Most series performed in the United States document to 2 to 5 percent incidence of malignant lesions of the thyroid gland. Incidence may be as high as 28 percent in Japanese autopsy series.[3] The majority of these lesions, clinically silent during the life of the patient, were recognized only at autopsy.

Most malignant thyroid neoplasms are not aggressive, and patients may survive many decades. Cumulative survival of the combined patients from several series of patients with papillary and mixed papillary follicular carcinoma of the thyroid gland approaches that of the normal population. A typical survival curve documents 80 to 90 percent survival 25 years after initial treatment. The overall prognosis depends on age, tumor size, and the particular tissue type with excellent longevity for papillary and mixed papillary follicular lesions of the thyroid. Follicular cancers are slightly more aggressive, having a 25-year survival rate of approximately 60 percent. Medullary carcinoma and Hürthle cell carcinoma of the thyroid have approximately the same survival rate as follicular carcinoma. The undifferentiated thyroid cancers, typified by anaplastic carcinoma of the thyroid, are among the most virulent of all known human neoplasms: survival is measured in weeks. Fortunately such lesions are rare. The majority of thyroid cancers consist of the differentiated thyroid tumors with an approximate 1 to 3 percent anaplastic carcinoma rate (Table 1). Death from thyroid cancer remains rare, with estimates of 5 deaths per million population per year.

Treatment of differentiated thyroid cancer is effective. In a large series of patients with papillary and mixed papillary follicular carcinoma reported by Mazzaferri *et al.*, treatment with surgical resection of the tumor, radioactive iodine ablation, and thyroid hormone suppression resulted in an excellent cure rate and no deaths over a 20-year follow-up.[4] The recurrence rate of thyroid malignancy during this period was 3 percent compared with 40 percent in patients not receiving radioactive iodine and thyroid hormone suppression. Radioactive iodine can be effective in decreasing the recurrence rate. The survival of patients with differentiated thyroid cancer is so good that it has been difficult in some series to show a statistical improvement in survival with radioactive iodine therapy. Nonetheless, the recurrence rate of local metastases does show a significant decrease with adjuvant radioactive iodine and thyroid hormone treatment.

Thus, the practicing physician is often left with the "paradox of the nodule." Thyroid nodules are common, unlikely to be malignant, treatable even if malignant, and rarely cause the death of the patient. The alternatives in patient management are often polarized into an operate-on-all approach versus benign neglect. The rational course is somewhere between these two extremes, particularly given the natural history of the thyroid nodule. As stated, there are certain aspects of

Table 1. Thyroid Cancer

	Percent
Papillary Mixed papillary and follicular	60
Follicular Hürthle	20
Medullary	10
Anaplastic	3
Lymphoma, Sarcoma	3
Metastatic	3–4

the history, physical examination, and pertinent diagnostic testing that assist in the delivery of effective care for each individual patient.

Factors Associated with Thyroid Cancer

Certain recognized factors are associated with thyroid cancer. The presence of a thyroid nodule in a child has been associated with malignancy in approximately 40 percent of the individuals. In this young group the occurrence of congenital anomalies is frequent, with anterior neck masses commonly due to causes other than thyroid nodules. This latter group would include dermoid cyst, branchial cleft cyst, teratomas, pharyngeal pouches, and cystic hygromas. The difficulty in performing biopsies on younger patients and the concern with developmental anomalies and malignancy rates often forces physicians to proceed with direct surgical removal for the diagnosis and definitive treatment.

The occurrence rate of significant thyroid malignancy is greater in a solitary nodule than in a multinodular goiter. Several series have documented that the clinically significant malignancy rate with multiple nodules is low, particularly given the enormous frequency of underlying multinodular goiter.[1,5] Not infrequently, surgical specimens from multinodular glands will show malignancy in a lesion that is unrelated to the nodule of clinical concern and probably never would have caused significant disease in the patient. The finding of a "pathologist's tumor," represented by small papillary or mixed papillary follicular carcinoma less than 1 cm in diameter, best illustrates this latter group.

A major risk factor for the development of thyroid nodularity and malignant transformation in the thyroid is exposure of the head and neck region during childhood or adolescence to ionizing radiation. Several carefully completed studies document that exposure to ionizing radiation in doses as listed in Table 2 was associated with a marked increased risk for the development of thyroid malignancy.[6] In general, such studies have shown that approximately 9 percent of all individuals exposed will develop a thyroid malignancy. If a palpable abnormality is noted on physical examination, the malignancy rate for these thyroid nodules approaches 30 percent, a significant increase over that reported in other thyroid nodule series. The latency between exposure to the radiation and detection of thyroid malignancy may vary between 10 and 40 years with a mean of approximately 25 years. Thyroid tumors that develop are typical of the natural occurrence type, and survival curves are similar. Nonetheless, radiation exposure represents a significant risk factor and demands particular attention in historical data gathering, requiring interviews with parents of the patient.

Table 2. Head and Neck Irradiation During Childhood

Radiation History	Radiation Dose (RADS)
Enlarged tonsils/adenoids	600–1000
Thymic hyperplasia	200–600
Facial acne	1000–1500
Skin fungus	1000–1500

An additional risk factor is a family history of thyroid malignancy, particularly medullary carcinoma of the thyroid gland. This may exist as a sporadic unilateral medullary carcinoma or as part of the multiple endocrine adenomatosis type II syndrome. This latter disorder, consisting of pheochromocytoma, medullary carcinoma of the thyroid gland, and hyperparathyroidism, is transmitted as an autosomal dominant with a high degree of penetrance. Usually these medullary carcinomas are multifocal, distinguishing them from the sporadic type. Specific historical data may be valuable clues in recognizing this disorder in a kindred and may prompt detection of premalignant lesions using intravenous calcium and pentagastrin infusion to provoke a rise in calcitonin level above the level expected in normal persons.

To complement the historical data, there are certain physical characteristics that strongly suggest an underlying malignancy. A rapid increase in size is of greater concern than a gradual growth occurring over years. The diagnostic sensitivity of rapid increase in nodule size is not reliable, however. The most common cause of a sudden increase in nodule size is hemorrhage into the nodule. Any thyroid lesion that is hard and irregular in consistency and fixed to neighboring neck structures, any regional lymph node enlargement, and hoarseness have to be viewed as possibly indicating malignancy.

Diagnostic Tests

Even after careful review and consideration, the differential diagnosis of an anterior neck mass in a given patient remains fairly broad, as noted in Table 3, next page. While certain clinical situations are suspicious enough to proceed directly to operation, the practitioner more often requires specific diagnostic tools to improve the precision of diagnosis. Such aids for further evaluation include nuclear scanning, diagnostic ultrasound, or aspirational biopsy.

The most popular diagnostic tool to date has been the nuclear scan using technetium 99 or radioactive iodine. Technetium has been the standard radionuclide because of its low cost, low radiation dose to the thyroid, ease of administration, and the excellent technical qual-

ity of the thyroid image. The technetium molecule is rapidly transported across the thyroid membrane, similar to radioiodine, though it is not stored in the colloid substance. For this reason radioactive iodine gives better functional information about thyroid nodules. The drawbacks, however, are the time required for radioiodine thyroid scanning and the relatively high dose of thyroidal radiation in comparison to technetium. Both these compounds can be helpful in defining the functional aspects of particular thyroid nodules, although radioactive iodine is superior for autonomous nonsuppressible nodules.

Recognition of autonomous nodules is critical because they are nearly always benign. Nuclear scanning is particularly helpful if an autonomous nodule is noted, thus eliminating the risk of malignancy. Autonomous or hot nodules are relatively rare. As noted in Table 4, only 10 of 150 patients referred to the University of Maryland Hospital had a true autonomous nodule. The majority (93 percent) were cold or warm nodules with a malignancy rate on surgical removal noted at 14 percent. It is important to recognize that malignancy can occur not only in cold nodules but also in warm nodules. It is the autonomous nodule that has the critical diagnostic significance to eliminate concern with malignancy.

Thyroid ultrasound allows excellent anatomic definition of the thyroid gland. With high resolution gray scale scanners, very small lesions (even to the level of 2 mm) can be detected by a skilled ultrasonographer. The ability to differentiate benign from malignant lesions is still difficult, however. The finding of a simple, solitary cyst or a halo effect around a solid nodule can be strong evidence in favor of a benign lesion, though such findings occur with less than 20 percent frequency. A partial cyst or complex nodule is equal to cold and warm nodules on nuclear imaging in terms of diagnostic significance: there is an approximate 10 to 20 percent risk of malignancy and no increase in the precision of diagnosis. Nonetheless, ultrasonography can be useful in documenting the presence of nonpalpable small lesions, confirming an unsuspected multinodular goiter with its lower risk of clinically significant malignancy, and in accurately sizing nodules for follow-up during l-thyroxine suppression.

Table 3. Differential Diagnosis of Thyroid Nodule

Adenoma
Malignancy
Simple cyst
Hashimoto's thyroiditis
Subacute thyroiditis
Hemiagenesis
Lymphoma
Parathyroid cyst
Developmental anomaly

Table 4. 150 Single Thyroid Nodule

	Benign	Malignant
Hyperfunction	10	0
Normal function	24	6
Hypo function	95	15
TOTAL	129	21 (14%)

The major diagnostic advance in the last 10 years has occurred in aspirational techniques in the thyroid nodules. The aspiration of such nodules has been a common diagnostic modality in Northern European centers during the last 30 years, but only recently has it received attention in North America. The alternative biopsy techniques consist of fine needle aspirational biopsy, a cutting needle Vim-Silverman biopsy, or open excisional biopsy. The latter two techniques yield a bulk specimen suitable for histologic examination, which can be useful in the diagnosis of the underlying lesion, although significant patient discomfort and some risk often is entailed in these procedures. The operator must have considerable dexterity and experience with these techniques. There is a significant possibility of hematoma formation and potential damage to contiguous structures such as blood vessels or the recurrent laryngeal nerve.

Recent advances in cytopathology have allowed improved use of thin needle aspirational material in the diagnosis of tumor types, particularly in the thyroid gland. This technique has become popular primarily because of ease of performance, negligible morbidity, and lack of patient discomfort. The procedure typically is performed with a 22 to 25 gauge needle attached to an aspirational syringe and gun. The needle is directed into the thyroid nodule, which is held in place by the operator's other hand. Single cells and nests of cells are retrieved, processed by the Papanicolau and Giemsa techniques, and examined by a well-trained cytopathologist. The cytopathologist's skill is critical in the interpretation of aspirational material. With the increasingly frequent use of this technique, the availability of such pathologists has increased.

Maryland Experience

We have performed nearly 500 thyroid biopsies on more than 200 patients seen in the Maryland area. The

specific diagnostic categories noted from such aspirational procedures are shown in Table 5. Thirty-five percent of the nodules were characterized as colloid or macrofollicular in nature (benign). To date no missed cancers (false negatives) have occurred in this group, and the cytopathologic diagnosis is sound. Thirty-seven percent were classified suspicious. The majority of these suspicious lesions (two-thirds) were follicular neoplasms with a microfollicular pattern, and one-third were mixed papillary follicular neoplasms. In this suspicious group it is difficult to separate well-differentiated follicular carcinomas from adenomas, and the term follicular neoplasm is preferred by most cytopathologists. Nonetheless, the reliability of the "follicular neoplasm" is excellent, with 85 percent accuracy noted. The mixed papillary follicular lesions are occasionally a problem in differentiating hyperplastic adenomatous goiter from low grade papillary carcinoma. In this suspicious group, surgical resection has revealed that 15 to 20 percent will prove to be malignant and 80 percent to be benign, such as follicular adenoma or hyperplastic goiter.

Based on cytopathologic criteria, the diagnosis of definite malignancy or highly suspicious was noted in 3 percent of the biopsies. In all these patients the diagnosis was accurate on subsequent surgical resection. An equally high precision is noted for Hürthle cell lesions, medullary carcinoma, anaplastic cancer, and lymphoma of the thyroid.

Cystic nodules were noted in 20 percent of the patient group. Most were hemorrhagic in nature, and 9 percent of the entire group of patients were cured by aspirational fluid removal. The overall incidence of cystic nodules was 45 percent, again with the majority containing hemorrhagic fluid. Finding a cystic lesion is strong evidence against a malignancy; several studies note a 1 percent malignancy rate in lesions less than 4 cm in size.

An additional benefit was recognition of unusual anterior neck masses such as parathyroid cyst, enlarged lymph node, scar tumor, and cystic hygroma. All were unsuspected clinically prior to thin needle aspiration. Two percent of the patient group had nodules secondary to autoimmune thyroiditis.

The aspirational technique improved the accuracy of diagnosis in two-thirds of the referred patients. In the remaining one-third the practitioner was left with a suspicious biopsy, typically a follicular lesion or a hyperplastic mixed papillary follicular lesion. This difficulty often is encountered by the pathologist even on final histologic examination of the resected nodule.

Table 5. Biopsy Categories from Thin-Needle Aspiration of Thyroid Nodules

	Percent of Total
Colloid nodule	35
Suspicious	37
Follicular neoplasm	
Papillary-follicular neoplasm	
Papillary lesion	
Malignant—highly suspicious	3
Autoimmune thyroiditis	1
Cystic nodules	20
Vanished (10 percent of total)	
Inadequate specimen	2
Other	2
Parathyroid cyst	
Lymph node	
Scar	

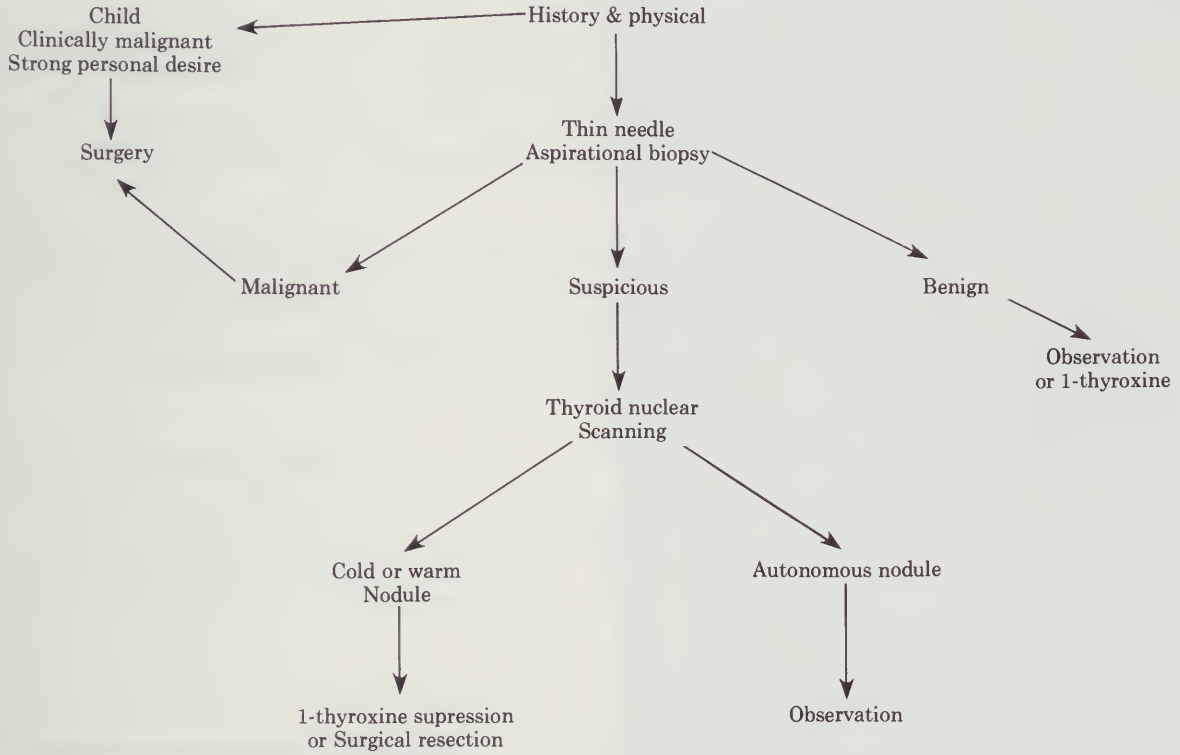
Practical Approach

For patients presenting with a solitary thyroid nodule or a rapidly enlarging single lesion of a multinodular gland, the following management sequence is offered (Table 6, next page). After a careful history and physical examination, a certain subgroup with a high suspicion for malignancy can be identified and referred for surgical opinion. Such a subgroup consists of children with anterior neck masses; patients exposed to head and neck radiation with a palpable lesion, thyroid nodules that are obviously malignant, based on the clinical criteria of fixation to neck structures, hoarseness, and lymph node enlargement; and probably another group of patients who are strongly desirous of surgical resection for personal concerns.

The remainder may have the thyroid nodule sampled by thin needle aspiration. If the material is classified as highly suspicious or malignant, the patient can be referred for surgical resection. If the nodule is a simple cyst, a hemorrhagic cyst that decreases significantly in size, or an obvious benign lesion such as a colloid nodule, the patient can be reassured the likelihood of malignancy is low. Routine observation on a six-month basis or an attempt to decrease the nodule size with a course of 1-thyroxine suppression should be considered for this group.

A patient with nodules in a suspicious category, could proceed to nuclear scanning. Individuals with an autonomous hot nodule can be reassured this lesion is benign and asked to return for routine follow-up. Those with a cold or warm nodule can be offered a course of 1-thyroxine suppression or surgical resection. Because of the precision of diagnosis, 1-thyroxine suppression is a reasonable alternative for this group. Grossly malignant tumors would have been detected during the initial biopsy, and the patient would be left with only a small

Table 6. Thyroid Nodule



chance of a well-differentiated low grade malignancy. Thyroid suppression may decrease the nodule size in 30 to 40 percent of such patients, further lowering the likelihood of malignancy. In the group that fails to suppress after 6 to 12 months, a repeat biopsy should be considered or direct referral for surgical resection.

Patients with an unusual anterior neck mass such as parathyroid cyst, hygromas, and adipose tumors can be managed as befits the primary diagnosis.

The approach to the individual patient depends on careful integration of the history, physical signs, and pertinent diagnostic tests to arrive at a rational management plan. Each of the diagnostic modalities offers different information and complements the other. Bearing in mind the natural history of thyroid nodules and the system described above, the thoughtful physician can usually guide each patient to a satisfactory outcome.

References

1. Vander, J.B.; Gaston, E.A.; and Dawber, T.R. "Significance of Solitary Non-Toxic Thyroid Nodules." *N Engl J Med* 251(1954):970.
2. Mortensen, J.D.; Woolner, L.B.; and Bennett, W.A. "Gross Microscopic Findings in Clinically Normal Thyroid Glands." *J Clin Endocrinol Metab* 15(1955):1270.
3. Fukunaga, F.H.; and Yatani, R. "Geographic Pathology of Occult Thyroid Malignancy." *Cancer* 36(1975):1095.
4. Mazzaferri, E.L.; Young, R.L.; and Oertel, J.E. "Papillary Carcinoma: The Impact of Therapy in 576 Patients." *Medicine* 56(1977):171.
5. Sokal, J.E. "The Incidence of Thyroid Cancer and the Problem of Malignancy in Nodular Goiter." *Clinical Endocrinology.* Vol. 1. E.B. Astwood (ed.). New York: Grune & Stratton, Inc., 1960, pp. 168.
6. Favas, M.D. *et al.* "Thyroid Cancer as a Late Consequence of Head-Neck Irradiation: Evaluation of 1,056 Patients." *Ann Int Med* 294(1976):1019.
7. Duffy, BJ.J. and Fitzgerald, P.J. "Cancer of the Thyroid in Children: a Report of 28 Cases." *J Clin Endocrinol* 10(1950):1296.
8. Winship, T. and Rosvoll, R.V. "Thyroid Carcinoma in Childhood." *Cancer* 14(1961):734.

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The Library Page

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during June 1986.

		No. of citations
1.	Aortic rupture	26
2.	Autoimmune thyroiditis	29
3.	Diagnosis of phenylketonuria	20
4.	Elder abuse	34
5.	Human t-cell leukemia virus, psychology, and sociology	36
6.	Irvine-Gass syndrome	15
7.	Leukapheresis and neoplasms	17
8.	Pathology of hydatidiform mole	23
9.	Superior vena cava occlusion	19
10.	3, 4-methylenedioxyamphetamine	13

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

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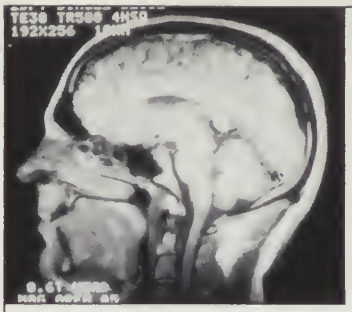
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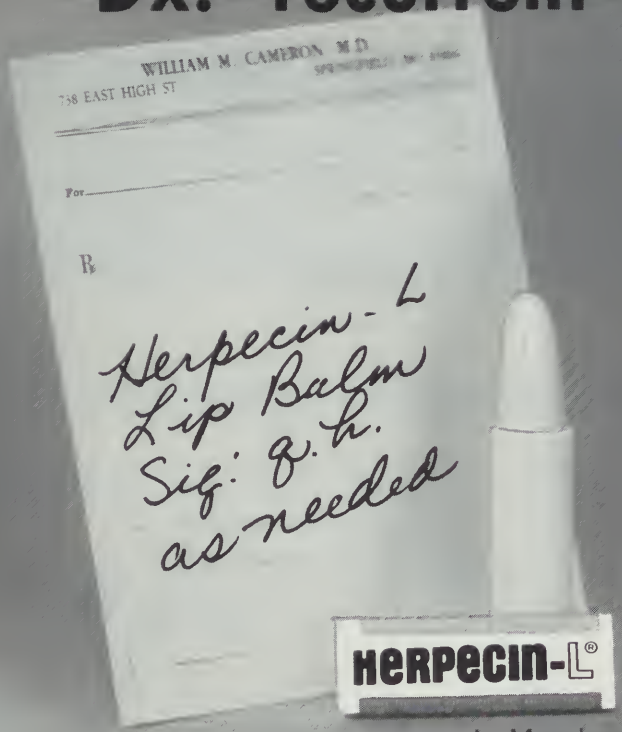
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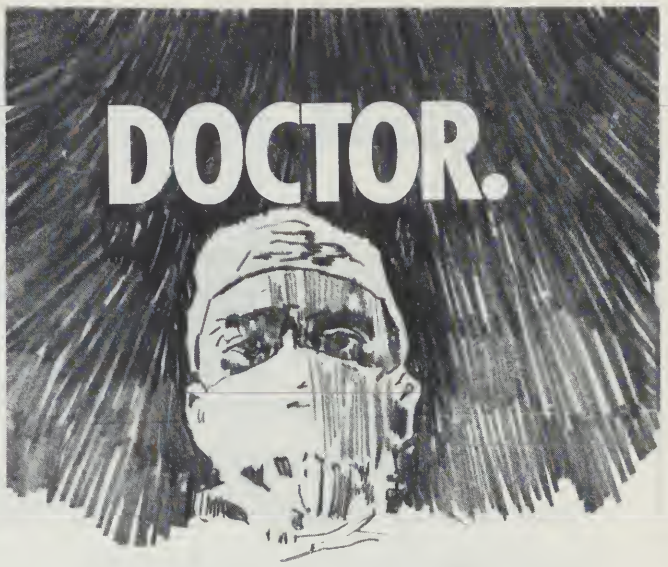
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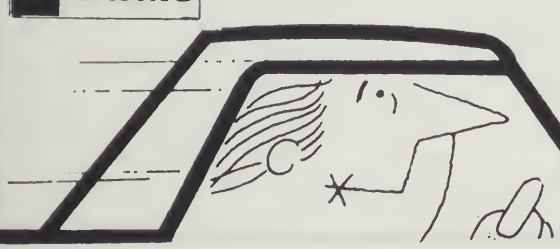
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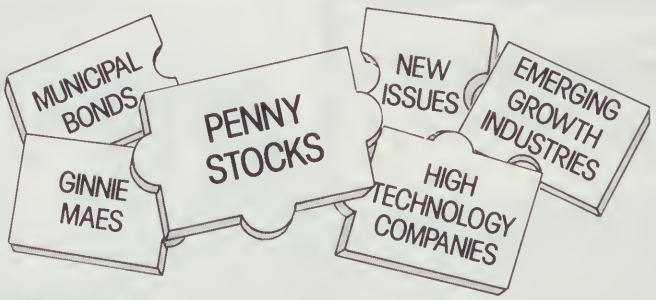
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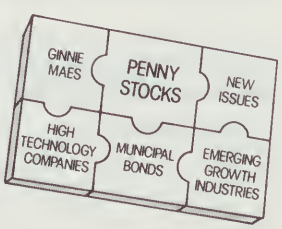
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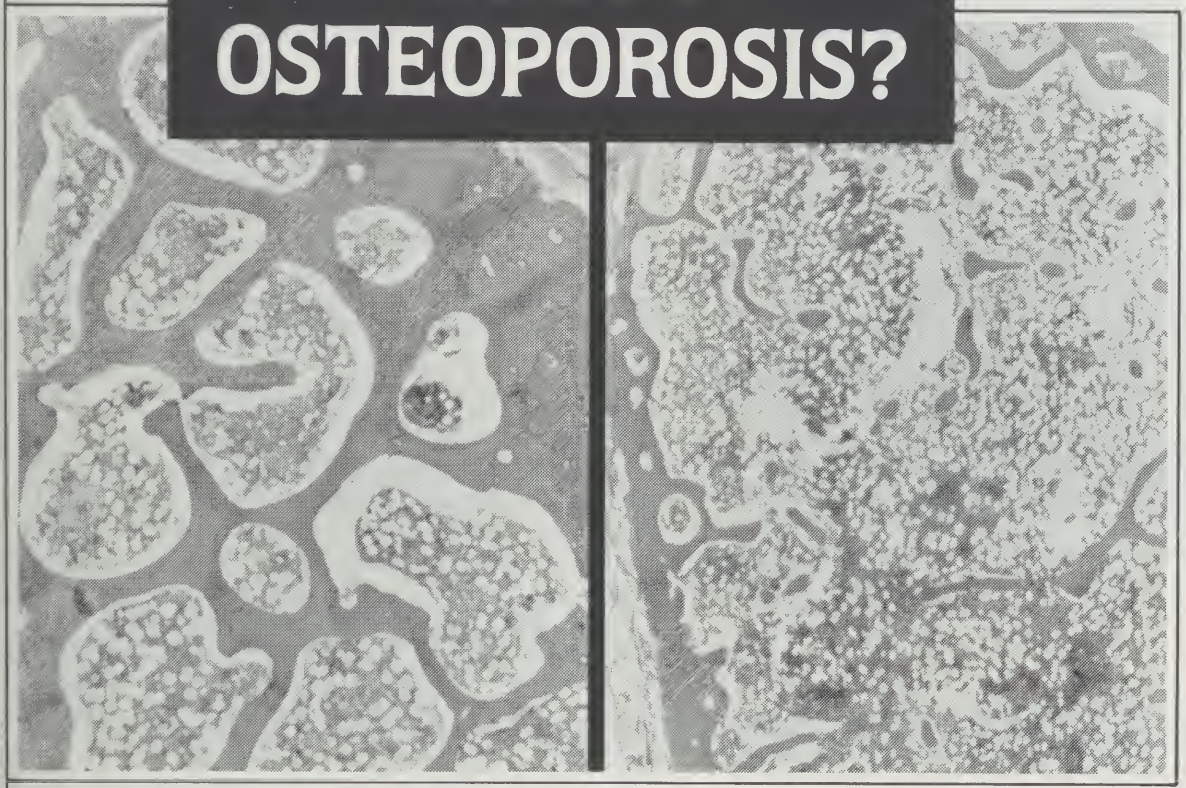
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Oct 6–8—NIH Consensus Development Conference Platelet Transfusion Therapy, Warren Grant Magnuson Clinical Center, NIH, Bethesda, Info and registration: S. Feldman, Prospect Assoc., Ste 500, 1801 Rockville Pike, Rockville, MD 20853 (301-468-6555).

Oct 15 Recognizing and Treating Depression, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322.

Oct 17 Selected Topics in Pediatrics, sponsored by Eastern Virginia Medical School/Children's Hospital of the King's Daughters, Norfolk, VA. Info: J.E. Shelton MD, Children's Hospital of The King's Daughters, 800 West Olney Rd., Norfolk, VA 23507 (804-628-7179).

Oct 17–18 Alternative Delivery Systems: Strategies for Physician Control, sponsored by the American Society of Internal Medicine, Marriott Crystal Gateway, Washington, DC. Fee: ASIM members $350, nonmembers $425. Info: ASIM, 1101 Vermont Ave NW—Ste 500, Washington, DC 20005-3457.

Nov 13–14 Current Controversies in the Management of Prostate Carcinoma, Hyatt Regency Hotel, Inner Harbor, Baltimore, sponsored by the American Cancer Society, held in conjunction with the Mid-Atlantic Oncology Program. Info: K. T. Drake MD, Chairman, Dept. of Radiation Oncology, GBMC, 6701 N. Charles St., Baltimore, MD 21204 (301-828-2540).

Nov 19 Panic Disorders, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

Nov 21–22 Regional Scientific Continuing Medical Education Meeting, American College of Physicians, Annapolis. Info: F.M. Calia MD, VA Medical Center, Medical Services (111), 3900 Loch Raven Blvd., Baltimore, MD 21218 (301-467-4824).

Dec 8–10 NIH Consensus Development Conference—Diet and Exercise in Noninsulin-Dependent Diabetes Mellitus, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info and registration: S. Feldman, Prospect Assoc., Ste 500, 1801 Rockville Pike, Rockville, MD 20853 (301-468-6555).

Dec 17 The Application of Bowen Family Systems Theory to Spouse Abuse, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

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Oct 9 Present and Future Trends in Cardiology, Sheraton Inner Harbor Hotel. Fee: $20; 5 AMA Cat I credits. Info: P. Macedonia, 301-955-6085.

Oct 9–11 12th Annual Topics in Gastroenterology and Liver Disease. Fee: physicians $325, residents and fellows $160 (with letter verifying status); 20.5 AMA Cat I credits. Info: J. Ryan.

Oct 17–18 Update in Dermatology for the Non-

dermatologist, Harbor Court Hotel, Inner Harbor, Baltimore. Fee: $150; AMA and other appropriate credit is pending. Info: J. Ryan, 301-955-6046.

Oct 17–19 Symposium on Pediatric Gastroenterology, The Carousel Hotel in Ocean City, Maryland. Fees: Member (AAP) $125; nonmember $140; 10.5 AMA Cat I credits. Info: P. Macedonia, 301-955-6085.

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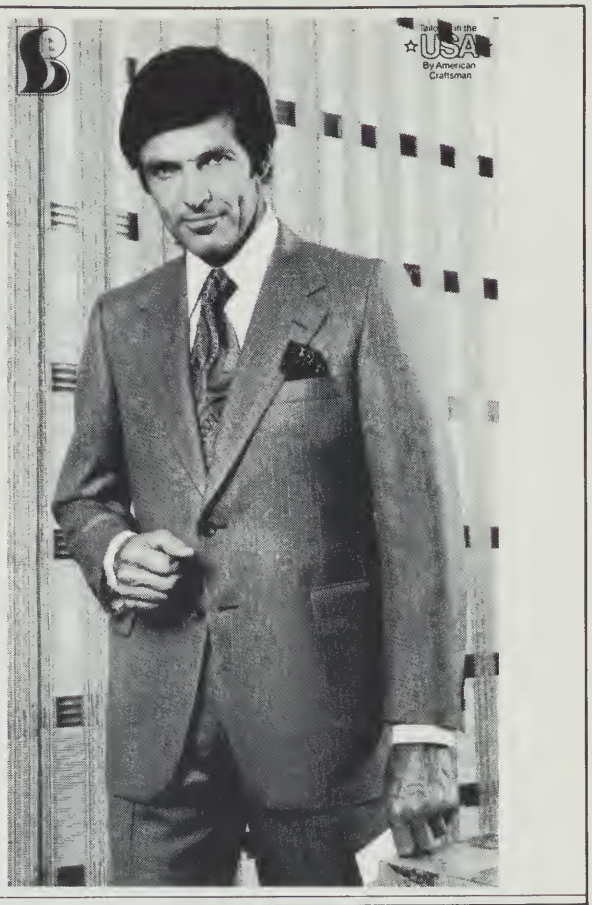
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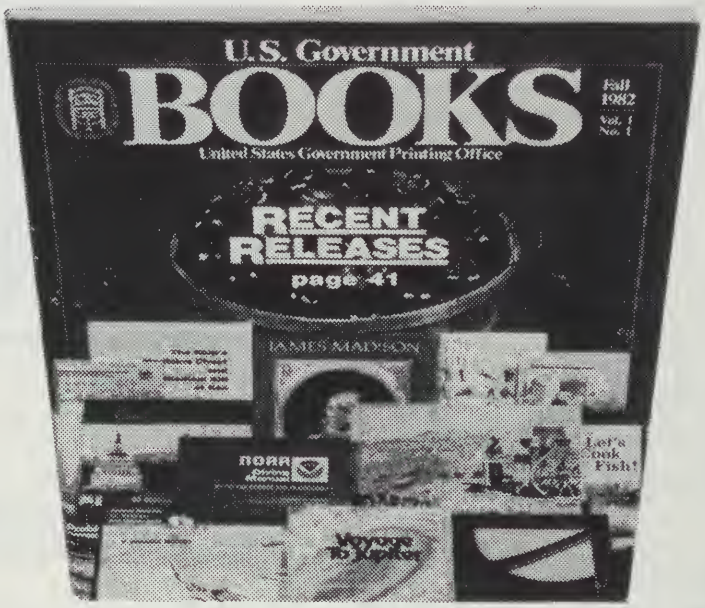
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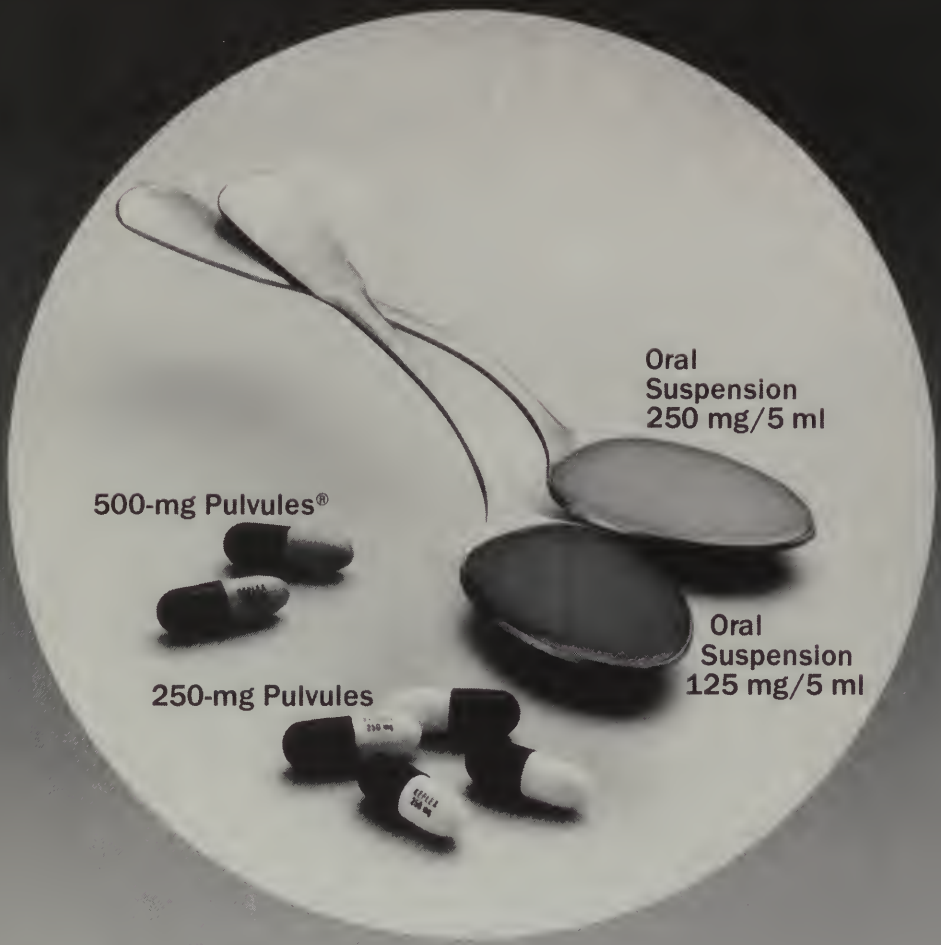
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CONTRAINDICATIONS
CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of o functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of o functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).
WARNINGS

1. ***Cardiac Conduction.*** *CARDIZEM prolongs AV node retractary periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beto-blockers or digitolis moy result in additive effects on cordioc conduction. A patient with Prinzmetol's angino develaped periods of osystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.*
2. ***Congestive Heart Failure.*** *Although diltiozem has a negative inotropic effect in isolated animal tissue preparations, hemodynomic studies in humans with normol ventricular function have not shown a reduction in cordioc index nor consistent negative effects on contractility (dp/dt).*
   Experience with the use of CARDIZEM alone or in combination with beto-blockers in patients with impaired ventricular function is very limited. Coution should be exercised when using the drug in such patients.
3. ***Hypotension.*** *Decreases in blood pressure ossociated with CARDIZEM therapy moy occasionolly result in symptomatic hypotension.*
4. ***Acute Hepatic Injury.*** *In rare instances, significant elevations in enzymes such os alkoline phosphotase, CPK, LDH, SGOT, SGPT, ond other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)*

PRECAUTIONS
General. *CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver ond excreted by the kidneys and in bile. As with any new drug given over prolonged periods, loboratory parameters should be monitored at regulor intervols. The drug should be used with caution in patients with impaired renal or hepatic function. In subocute ond chronic dog and rot studies designed to produce toxicity, high doses of diltiozem were ossociated with hepatic domoge. In speciol subacute hepatic studies, oral doses of 125 mg/kg ond higher in rots were associated with histalagicol changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were olso ossociated with hepatic chonges; however, these chonges were reversible with continued dosing.*

Drug Interaction. *Phormocologic studies indicate that there moy be additive effects in prolonging AV conduction when using beto-blockers or digitolis concomitontly with CARDIZEM. (See WARNINGS.)*

Controlled ond uncontrolled domestic studies suggest thot concomitont use of CARDIZEM ond beto-blockers or digitalis is usually well tolerated. Avoilable data are not sufficient, however, to predict the effects of concomitont treatment, particulorly in patients with left ventricular dysfunction or cordioc conduction obnormolities. In healthy volunteers, diltiazem hos been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was olso no mutagenic response in in vitro bocteriol tests. No intrinsic effect on fertility was observed in rats.*

Pregnancy. *Category C. Repraduction studies hove been conducted in mice, rats, ond rabbits. Administration of doses ranging from five to ten times greater (on o mg/kg basis) thon the daily recommended therapeutic dose hos resulted in embryo ond fetol lethality. These doses, in some studies, hove been reported to couse skeletal obnormolities. In the perinatal/postnatal studies, there was some reduction in early individuol pup weights ond survivol rates. There was on increased incidence of stillbirths ot doses of 20 times the humon dose or greater.*

There are no well-controlled studies in pregnont women; therefore, use CARDIZEM in pregnont women only if the potentiol benefit justifies the potentiol risk to the fetus.

Nursing Mothers. *Diltiozem is excreted in human milk. One repart suggests that concentrations in breast milk moy opproximate serum levels. If use of CARDIZEM is deemed essential, an olternative method of infont feeding should be instituted.*

Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS
Serious odverse reactions hove been rore in studies corried out to date, but it should be recognized that patients with impaired ventricular function and cordioc conduction obnormolities hove usually been excluded.

In domestic placebo-controlled trials, the incidence of odverse reactions reported during CARDIZEM therapy was not greater thon that reported during placebo therapy.

The following represent occurrences observed in clinicol studies which con be at least reasonably ossociated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences os well os their frequency of presentation ore: edema (2.4%), headoche (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), osthenio (1.2%). In additian, the following events were reported infrequently (less thon 1%):

Cardiovascular:	*Angina, orrhythmio, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardio, congestive heart foilure, flushing, hypotensian, palpitations, syncope.*
Nervous System:	*Amnesio, goit abnormality, hollucinations, insomnio, nervousness, poresthesio, personality chonge, somnolence, tinnitus, tremor.*
Gastraintestinol:	*Anorexio, constipatian, diorrhea, dysgeusio, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechioe, pruritus, photosensitivity, urticorio.*
Other:	*Amblyopio, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestian, nocturia, osteoarticular pain, polyurio, sexual difficulties.*

The following postmorketing events have been reported infrequently in patients receiving CARDIZEM: olopecio, gingival hyperplasio, erythema multiforme, and leukopenia. However, o definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 11/85*
See complete Professional Use Information before prescribing.

References: ***1.*** *Pepine CJ, Feldman RL, Hill JA, et ol: Clinicol outcome after treatment of rest angino with calcium blockers: Comparative experience during the initiol year of therapy with diltiozem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347.* ***2.*** *Shopira W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159.* ***3.*** *Johnston DL, Lesoway R, Humen DP, et al: Clinicol and hemodynomic evaluation of propronolol in combination with veropamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardial 1985;55:680-687.* ***4.*** *Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39.* ***5.*** *Schroeder JS: Calcium and beto blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.*

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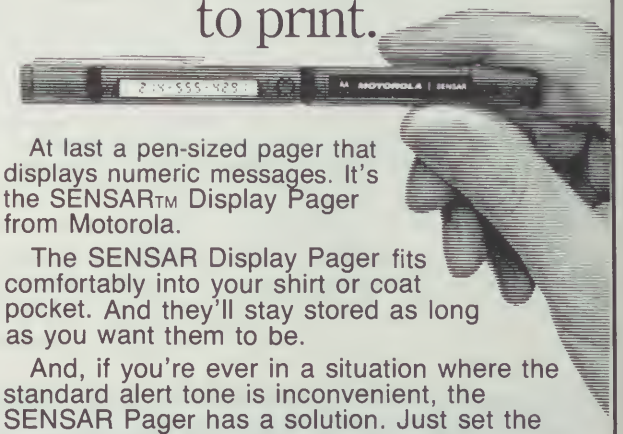
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Physicians whose surnames begin with the initials A through L will be renewing their license registrations this September 1986. The Board will start mailing renewal information around the middle of July.

Physicians who have not received the renewal information by the second week in August should contact the Board to get the information necessary for renewal before their licenses expire on September 30, 1986. It is the physicians' responsibility, by law, to communicate with the Board concerning renewal of their licenses if, for some reason, they do not receive the renewal application.

Physicians may contact the Board by writing to the address below or calling 301-225-5900.

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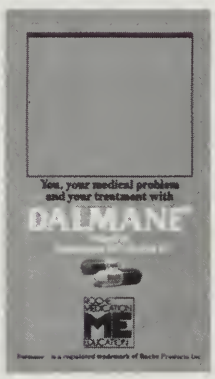
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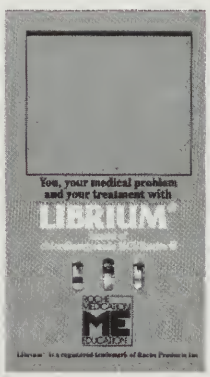
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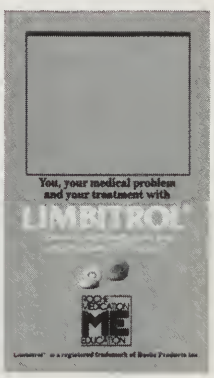
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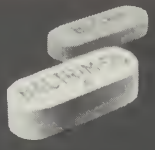
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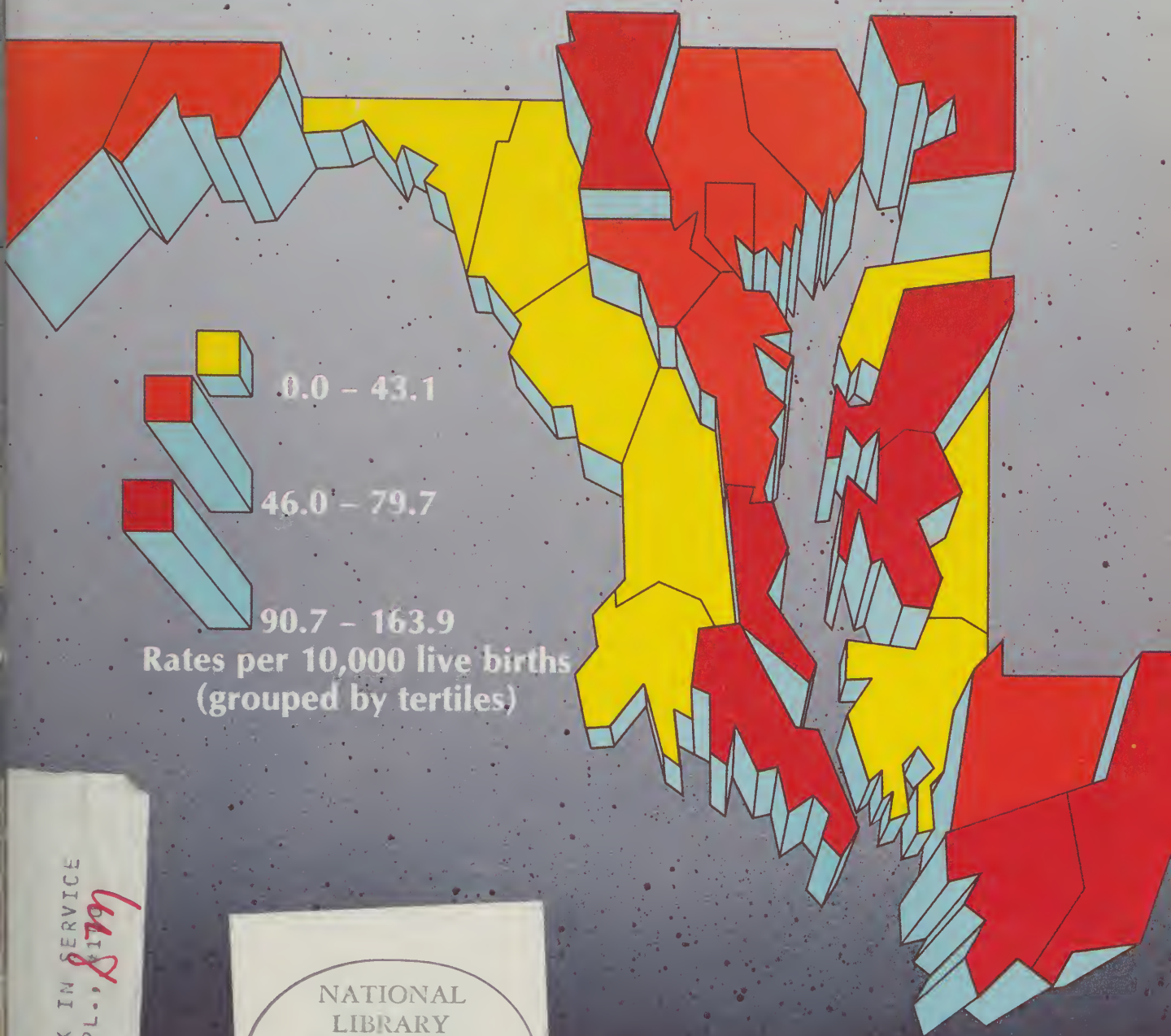
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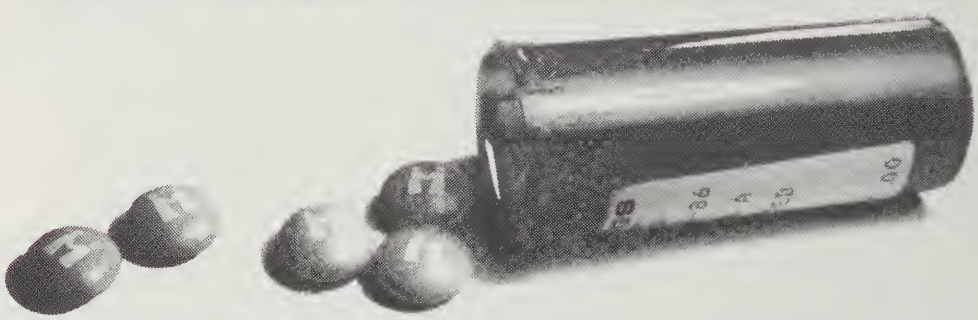
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On the cover: John Benson has illustrated reported rates and distribution of certain birth defects in Maryland. Article begins on page 837.

The views in this publication are those of the authors and do not necessarily reflect the opinion of the Medical and Chirurgical Faculty of the State of Maryland.

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Letter to the Editor

Foreign Medical Graduates and the Statue of Liberty's Birthday

The centennial of the Statue of Liberty gives foreign medical graduates cause for reflection. The majority of FMGs born and educated in many different parts of the world have also become immigrants.

All immigrants in some way are "foreign graduates" in the widest sense of the word. They learned their ABCs from their parents and graduated into kindergarten or first grade, graduated from religious instruction in their respective faiths, and they graduated from grade school and high school or universities.

Liberty as a political idea in the course of history matured and graduated many times in small and large countries and societies around the globe; it also died many times, but the spirit of Liberty sooner or later was picked up and kept alive by subsequent generations.

In modern times the United States of America has grown into the role of the Guardian of Liberty. Liberty has been personified as a female, and we recognize on this 100th birthday of the statue that the American woman has "graduated." More than ever women around the world look for the freedom and equality enjoyed by American women today.

Does the foreign medical school graduate as an immigrant really differ from the millions of other immigrants before him or her? Clearly there is a difference: namely in privilege. Just stop and think how after a few additional examinations the FMG has all the opportunities America can offer and is accepted by peers and by patients.

To have been the beneficiary of extraordinary opportunities and the spirit of equality should cause us to light a flame atop a torch of gratitude, visible to our fellowmen like the light in the hand of Liberty at the entrance to New York harbor and reaching across the land like the gateway to the West in St. Louis designed by Eero Saarinen, son of an immigrant.

Of what form and meaning should this gratitude be? It should be a heartfelt thank you to the country and to the states that officially allowed us to practice medicine, it should be a thank you to the universities and hospitals where we learned and had the opportunity to prove ourselves as members of their medical staffs, it should also be a thank you to our colleagues of the Medical and Chirurgical Faculty for having accepted us in the great and honorable fraternity of physicians.

It is with pride and humility that I express my own thanks with a pledge to financially support medical education in Maryland with a contribution on the occasion of this memorable year. I call on my fellow FMGs to join me in this expression of gratitude.

As an opener, one could think to split contributions three ways: to the two medical schools and to Med-Chi.

- Names of husbands, wives, and children should appear on the Honor Roll.
- Med Chi's treasurer, himself an FMG, could carry out the logistics supported by a special committee of FMGs.

It could become an important Maryland first if FMGs of all other states would follow our example.

There are slightly above 1,900 FMGs in Maryland. If everyone gives according to his/her ability (which admittedly would vary) I arrive at the following:

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Average donation	$200 =	380,000 *dollars*
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As the late Senator Everett M. Dirkson once said, "a few thousand dollars here, a few thousand dollars there, and soon you talk about real money." Indeed, across the nation it should amount to real money.

Let us begin in Maryland, and future medical historians will call it the FMG's finest hour.

CHRISTIAN S. MASS **MD**
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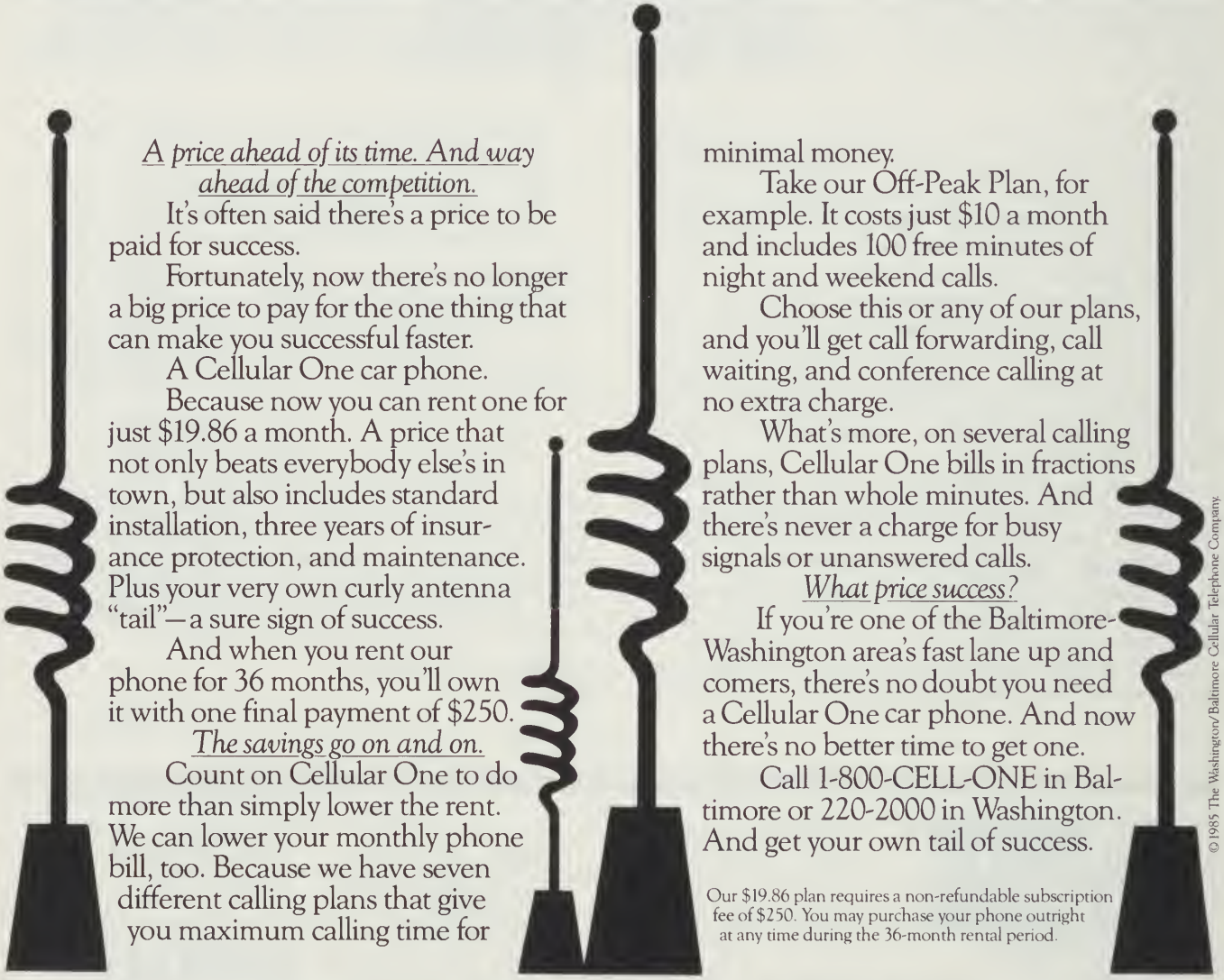
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Discipline Commission Action

In the Matter of
Arcadius Hakim MD
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Notification of Termination of Probation and Reinstatement of Medical License

By Order dated March 1, 1983 (the "1983 Order") the Commission on Medical Discipline (the "Commission") found that Arcadius Hakim MD (the "Respondent") was convicted of or pleaded guilty or nolo contendere with respect to a crime involving moral turpitude . . . , pursuant to the Annotated Code of Maryland, Subsection 14-504(6).

At its meeting of April 1, 1986, the Commission reviewed Respondent's request for termination of probation. Based on its review, the Commission determined the Respondent had fulfilled the Conditions of Probation contained in the March 1, 1983 Order.

Findings of Fact

The Commission finds that Applicant has satisfactorily complied with all the Conditions of Probation imposed by the Commission's 1983 Order.

Conclusions of Law

The Commission concludes, as a matter of law, that it is appropriate to terminate Applicant's Conditions of Probation and to reinstate his license without any condition or restriction.

Order

Upon the foregoing Findings of Fact and Conclusions of Law, it is this 25th day of April 1986, by a unanimous vote of a quorum of the Commission:

ORDERED that effective as of the date of this Order, the Conditions of Probation imposed upon the Applicant's practice of medicine by the Commission's 1983 Order are hereby TERMINATED and of no further force and effect; and be it further

ORDERED that Respondent's license to practice medicine in the State of Maryland be REINSTATED without any condition or restriction whatsoever.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline

In the Matter of
James E. Pollock MD
Before the
Commission on Medical Discipline

Notification of Termination of Probation and Reinstatement of Medical License

By Order dated June 5, 1984, the Commission on Medical Discipline found James E. Pollock MD under the Maryland Medical Practice Act, Health Occupations Article 14-101 *et seq.*, Annotated Code of Maryland to be in violation of 14-504(9) of the Act and placed him on PROBATION for two (2) years.

At its meeting of June 17, 1986, the Commission reviewed Applicant's request for termination of probation. Based on its review, the Commission determined that the Respondent had fulfilled the Conditions of Probation contained in the June 5, 1984 Order.

Findings of Fact

The Commission finds that Applicant has satisfactorily complied with all the Conditions of Probation imposed by the Commission's 1984 Order.

Conclusions of Law

The Commission concludes, as a matter of law, that it is appropriate to terminate Applicant's Conditions of Probation and to reinstate his license without any condition or restriction.

Order

Upon the foregoing Findings of Fact and Conclusions of Law, it is this 23rd day of June 1986, by a unanimous vote of a quorum of the Commission:

ORDERED that effective as of the date of this Order, the Conditions of Probation imposed upon the Applicant's practice of medicine by the Commission's 1984 Order are hereby TERMINATED and of no further force and effect; and be it further

ORDERED that Respondent's license to practice medicine in the State of Maryland by REINSTATED without any condition or restriction whatsoever.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline

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The referring physician has a responsibility to evaluate the place to which he/she refers patients for dietary instruction and to review the quality of instruction received when the patient returns for a follow-up visit.

DeWITT E. DeLAWTER MD
Editor

Library Page

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during July 1986.

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2. Child abuse and the physician's role	30
3. Cocaine and the brain	17
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If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

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Reference and Circulation Librarian

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PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of the State of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to the Physician Placement Service, 1211 Cathedral St., Baltimore, MD 21201; telephone 1-301-539-0872.

Physicians wishing to locate in Maryland are invited to submit a resumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities which might be available in Maryland.

Journal announcements on the Classified Advertising page for Physician Placement Service are charged at the regular Classified Advertising rate.

Look for *Med-Chi Meetings* schedule in each issue of *MMJ*.

Members in the News

Donald A. Henderson MD, dean of The Johns Hopkins University School of Hygiene and Public Health, was honored at a ceremony in London in July for his outstanding leadership of the World Health Organization's global campaign that successfully eradicated smallpox. Dr. Henderson received the Richard T. Hewett Award consisting of a commemorative sculpture and a check for $10,000. The Award, established by SmithKline Beckman Corporation in 1982, is presented by The Royal Society of Medicine, London, and The Royal Society of Medicine Foundation, Inc., New York, for distinguished achievement in improving human health. The Award is named in honor of Richard T. Hewitt, OBE, MA, former Executive Director of The Royal Society of Medicine.

A native of Lakewood, Ohio, Dr. Henderson received his AB degree from Oberlin College in 1950, his MD from the University of Rochester School of Medicine in 1954, and his Masters of Public Health (MPH) degree from The Johns Hopkins School of Hygiene and Public Health, which he now directs. He served his internship and residency in internal medicine at the Mary Imogene Bassett Hospital in Cooperstown, New York. In 1955, he was appointed chief of the Epidemic Intelligence Service of the United States Center for Disease Control (CDC) and, subsequently, as chief of the surveillance section. At the CDC, he was actively involved in the conquest of poliomyelitis, in efforts to combat Asian influenza, infectious and serum hepatitis, and measles.

In 1965, Dr. Henderson was made director of a smallpox eradication and measles control program in 18 west central African nations. A year later, he was asked to direct WHO's new, intensified worldwide campaign against smallpox. During the course of the programs the staff included more than 700 advisors from 69 countries. More than 200,000 national staff and volunteers worked together in one of medicine's most ambitious undertakings.

During Henderson's first year as director of the WHO program, an estimated 10 to 15 million smallpox cases occurred, causing two million deaths in 43 countries in Latin America, Africa, and Asia. The last naturally occurring case of smallpox was reported in October 1977. On May 8, 1980, the World Health Assembly officially declared that smallpox had been eradicated. Never before had humanity succeeded in completely eliminating a disease.

Dr. Henderson has received numerous national and international awards throughout his career.

Area meetings and course announcements are listed each month under *Doctors Take Note*

Walter LeRoy Kilby
1902–1986

Walter L. Kilby MD died June 15, 1986 in Woodstock, Virginia after a long illness. Dr. Kilby practiced in Baltimore from 1936 to 1975, except for a period served in the Armed Services during World War II.

Born and raised in Rappahannock County, Virginia, he graduated from the University of Virginia with a BS degree and then devoted three years to teaching. He entered the University of Virginia Medical School in 1929 and received his MD in 1933. After interning at the Cincinnati General Hospital, he returned to the University of Virginia Hospital for training in Radiology.

Dr. Kilby came to Baltimore in 1936 to become associated with the late Henry J. Walton MD in the Department of Radiology at the University of Maryland Hospital and in private practice. He became Director of the Radiology Department and Professor of Radiology at the University of Maryland Medical School upon the resignation of Dr. Walton in 1940.

A veteran of World War II, Dr. Kilby spent 33 months with the University of Maryland-sponsored 142nd General Hospital and earned the rank of lieutenant colonel. In October 1945, he returned to his previous position at the University of Maryland, which he held until 1953 when he resigned to devote his full time to private practice.

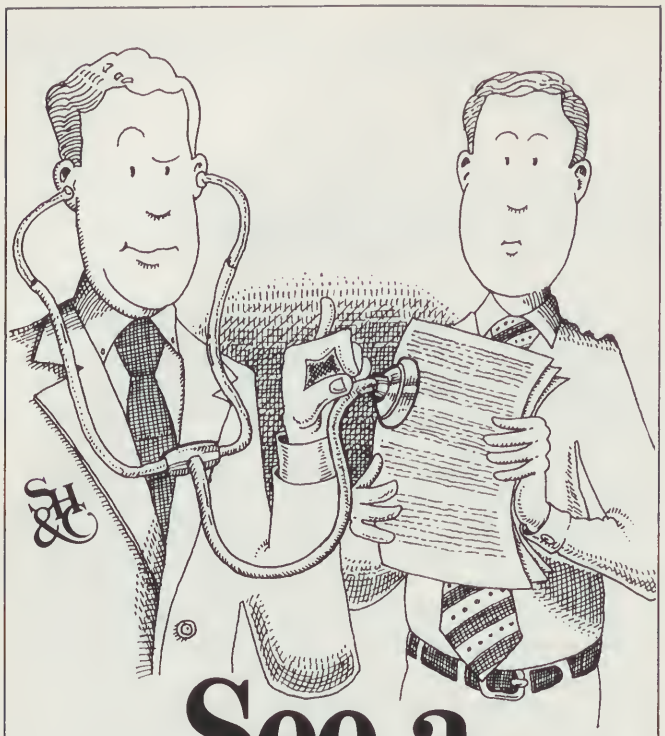
Michael Johns MD, Andelot professor and chairman of the Department of Otolaryngology-Head and Neck Surgery and professor of oncology, has been appointed associate dean for clinical affairs at The Johns Hopkins University School of Medicine.

• • •

William Reichel MD, Chairman of the Department of Family Practice at Franklin Square Hospital Center, was honored recently by The Society of Teachers of Family Medicine at their annual conference in San Diego. He was given the prestigious Certificate of Excellence award "in recognition of his contributions to the advancement of family medicine education and the significant impact he has had on the participation of family physicians in the field of geriatrics." Dr. Reichel is a former President of the American Geriatrics Society and most recently was Chairman of the Governor's Task Force on Alzheimer's Disease and Related Disorders.

• • •

Barry Rudnick MD recently became Admissions Officer at Sheppard Pratt Hospital. He was formerly



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Chief of Admissions Service and Director of Forensic Psychiatry Training at the University of Maryland School of Medicine.

A native of Utica, NY, Dr. Rudnick received his BS degree from Union College in Schenectady, NY and his MD degree from Albany Medical College in Albany, NY. He served his internship in Medicine and Psychiatry and his residency in Psychiatry at the University of Maryland School of Medicine in Baltimore.

Dr. Rudnick serves as a consultant to the state's Public Defender's Office as the Director of the City of Baltimore's Pretrial Screening Clinic.

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Auxiliary

Anne Arundel's Holiday Sharing: An Inspiring Example

In 1980 the Auxiliary to the Anne Arundel County Medical Society was recruited to undertake Holiday Sharing as one of the Auxiliary's community projects. The Auxiliary structured Holiday Sharing so well that this county project received an award from the National Association of Counties in 1983. Holiday Sharing also received a first place Community Service Award from the Auxiliary to the Medical and Chirurgical Faculty, having been selected from among twelve other county auxiliaries.

This project, chaired by Imelda Herzinger (Mrs. Ray), is operated by a dedicated group of volunteers. Members of the Anne Arundel Auxiliary, in conjunction with the Anne Arundel County Department of Social Services, put in approximately 500 volunteer hours yearly coordinating this effort to provide food, clothing, toys, and gifts for the county's needy families and senior citizens.

The main goals of the Holiday Sharing Program are to match donors with needy families at Thanksgiving and Christmas and to computerize a record of all such donors and recipients in order to avoid duplication of service. The Auxiliary works with the Department of Social Services, specifically under the Coordinator of Volunteers for the County. As the program becomes known, many other helping agencies clear names with the committee, resulting in less duplication and allowing more fair sharing of donations, spreading the giving as far as possible.

Referrals are taken from churches and from social workers who are aware of immediate needs and family crises. The Department of Aging refers many senior citizens to this program. These usually are people on minimal fixed incomes who have little food and nothing extra for the holidays.

Approximately $2,000 is received each year in cash donations. Donors vary from an individual family taking care of one family, a high school group providing 60 food baskets to a church group giving 90 Thanksgiving baskets, and donations of new toys that were distributed with food baskets in the Odenton, Severn, and Gambrills areas. Share Your Christmas Inc., a JayCees sponsored activity, used $8,000 in donated funds to provide gift certificates for 1,600 Anne Arundel County needy children.

Most important and vital to the success of the program are the many individuals who adopt one or more families, shop for them, and deliver food and gifts, often sacrificing their own family resources to do so.

Imelda Herzinger reports, "Last year was truly the most successful Holiday Sharing the Committee has ever had. We have much to be grateful for in our county: the spirit of generosity and willingness of our citizens to help those less fortunate than themselves is an inspiration and shining example for all to see."

Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland. Mrs. Nancy Howell, President; Mrs. Helen M. Reichel, Editor.

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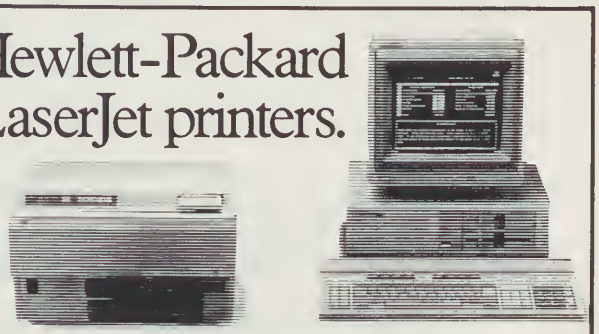
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Alzheimer Disease. Meridian Healthcare is helping to do something about it.

As the largest provider of long-term nursing care in Maryland, Meridian Healthcare is in a unique position to exercise some leadership in developing new techniques for caring for Alzheimer victims. Even more important, we have made a commitment to actively assist with the search for a cure for this serious, terminal condition.

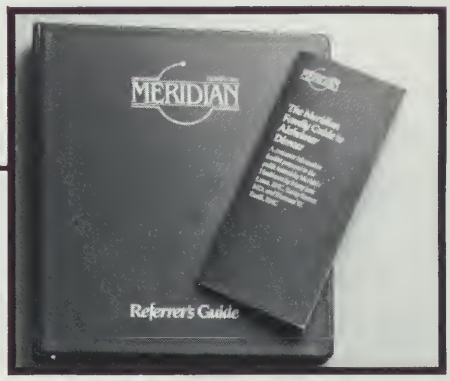
A specialty Alzheimer Disease Care Unit has been created at Meridian Nursing Center—Heritage in consultation with The Johns Hopkins University Medical Institutions to develop innovative approaches to care. To advance this research, Meridian funds an Alzheimer Disease Research Fellowship in The Johns Hopkins University Department of Psychiatry.

Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

Our concern with Alzheimer Disease is only one of many ways Meridian Healthcare is different. For more detailed information on our Alzheimer program or on any of our 13 Nursing Centers in Maryland, call or send the coupon for our free *Referrer's Guide*.

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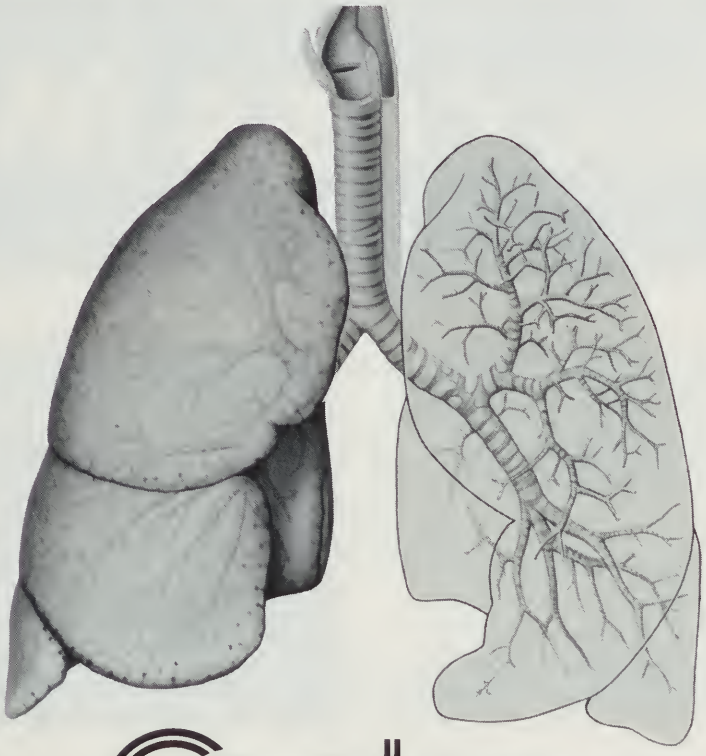
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Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

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- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
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Executive Director's Newsletter

October 1986

NEW EXECUTIVE DIRECTOR NAMED

Council appointed Angelo J. Troisi new Executive Director of the Faculty at its Semiannual meeting on September 27, 1986. Troisi, formerly Executive Director of the Prince George's County Medical Society, has a strong and varied background in health care administration. He officially assumed the role of Executive Director on October 1, 1986.

MEMBERSHIP SURVEY

In late October we will ask members of the Faculty to provide an overview of your attitudes and opinions about the status of the profession in Maryland as well as some demographic data about the practice of medicine in our state. Lack of specific data has hampered our efforts to show the Maryland Legislature the scope of the problems faced by our members. A positive response to this survey will assist the Faculty in better representing you and the profession to the public, the media, and the Legislature.

The confidentiality of survey responses will be strictly assured. If you have questions concerning this survey, please contact John Stierhoff in our Government Relations Department.

WORKMEN'S COMPENSATION

The following information was in a recent letter from Charles J. Krysiak, Chairman of the Workmen's Compensation Commission. When a physician assumes a worker's compensation patient, the physician is under the rules and regulations of the Maryland Worker's Compensation Commission. The bill is paid according to the Guide of Medical and Surgical Fees approved by the Commission. Under Maryland Worker's Compensation Law, a physician may not bill the patient for the balance.

The Faculty is negotiating with the Commission for a fee increase in the Guide.

PROFESSIONAL LIABILITY INITIATIVES FOR 1987

The Legislative Committee has reviewed possible legislation for introduction in the next Maryland General Assembly session. Passage will be sought for those items defeated last year including lowering the statute of limitations for minors, elimination of the collateral source rule, and mandatory structured payments over certain limits.

Efforts in Annapolis will again be coordinated through county medical societies and with the Auxiliary. Materials will be developed that will be of assistance in your discussions with legislators, many of whom will be newly elected Delegates needing to be educated about the liability problems as they affect various constituencies. Please make a commitment to speak about the issue with at least one legislator from your district.

LICENSE REGISTRATION EXTENDED

Because the Board of Medical Examiners sent renewal applications for physicians' registration with the last name beginning with A-L a month late, it has extended the date of these physicians' license registration to October 31, 1986.

ELECTION 1986

Although for many districts of the state, the Primary Election was decisive, some districts remain undecided. Of chief concern to physicians are races for U.S. Senate, Second, Fourth, and Eighth Congressional Districts; plus a few other contested General Assembly seats. NOVEMBER 4 is the day. Let your voice be part of the decision. VOTE!

STATEWIDE IPA

At its meeting on September 27, the Faculty's House of Delegates approved a study into the feasibility of forming a statewide IPA with the ability to contract for medical services on behalf of Maryland physicians.

PHYSICIAN ASSISTANTS

Maryland Physician Assistants Week, sponsored by the Maryland Academy of Physician Assistants, will be held October 20-26, 1986. "Decade of Excellence" is the theme of the celebration. As dependent practitioners, PAs provide traditional medical services under the supervision of a licensed physician.

COMMITTEE ON AIDS

We are in need of a physician member of Med-Chi to serve as Chairman of the Ad Hoc Policy Advisory Committee on AIDS. Suggestions should be forwarded to Mrs. Keefe at the Faculty.

THANK YOU

In the year it has been my privilege to serve as your acting executive director, you have freely shared with me your thoughts, ideas, and opinions. Your letters and telephone calls have kept me in touch with your needs. I am deeply grateful to each of you for the time you have taken and for the support you have given me. I encourage each of you to continue this dialogue with your new Executive Director, Angelo Troisi.



Acting Executive Director

CARE HOTLINE FOR IMPAIRED PHYSICIANS
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HOTLINE FOR EMERGENCY PSYCHIATRIC BEDS
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Pediatric Morning Report from The Johns Hopkins Children's Center

An Infant with Diarrhea

An 11-month-old infant was admitted with a brief history of diarrhea. The patient had had six loose stools in a period of 12 hours. There had been no vomiting. No one else was sick at home. The child had a temperature of 39°C and appeared toxic to the referring pediatrician. Initial laboratory findings included the presence of leukocytes in a stained specimen of stool and a white count of 10,000/mms with a differential of 40% polymorphonuclear leukocytes, 20% band forms, 34% lymphocytes, and 5% monocytes. Do we have enough information to make a presumptive diagnosis of a bacterial diarrhea? What is the probable agent?

Information is available from several studies of infants with diarrhea to identify clinical predictors of acute bacterial diarrhea. The best predictive variable for a stool culture positive for a bacterial pathogen is the presence of polymorphonuclear cells in the stool. One study [DeWitt, T.G. *et al. Pediatrics* 76(1986): 551] found that this finding had a sensitivity of 85 percent, a specificity of 88 percent, and a positive and negative predictive value of 59 percent and 97 percent respectively. In addition, the same study identified a cluster of three historical variables (abrupt onset of diarrhea, greater than four stools per day, and no vomiting before the onset of diarrhea) as useful predictors of having a stool culture positive for a bacterial pathogen. Our patient met all three of these criteria. What about the white cell count and differential? It also has been found to be helpful in distinguishing bacterial from viral diarrhea. It had been suggested that in shigellosis 85 percent of patients have more band forms than segmented neutrophils in their peripheral blood smear as compared to only 19 percent of patients with non-*Shigella* gastroenteritis [Poh, S. *Pediatrics* 39(1967): 119]. Subsequent studies have not come up with similar figures but have confirmed the diagnostic utility of the band to polymorphonuclear leukocyte ratio (B/N). The highest B/N ratios are observed in patients with shigellosis (0.38) but a B/N ratio of greater than 0.10 can help differentiate *Shigella*, *Salmonella*, and *Campylobacter* infections from *E. coli* and nonbacterial gastroenteritis [Ashkenazi, S. *et al. Clin Pediatr* 22(1983): 356] as shown in Table 1. By the way, our patient's stool culture grew *Salmonella*.

Table 1. Total and Differential Leukocyte Count in 238 Patients with Acute Gastroenteritis

Etiologic Agent	Number of Patients	Age (Years)	WBC (10^3/cu mm)	B/N Ratio*	Absolute Band Count (/cu mm)	Patients with More Bands Than Neutrophils
Nonbacterial	46	5.03 ± 0.56†	8.43 ± 0.47†	0.08 ± 0.01†	383 ± 102†	—
E. Coli	12	0.86 ± 0.16	9.05 ± 0.77	0.09 ± 0.03	411 ± 181	—
Campylobacter	25	1.05 ± 0.60	10.30 ± 0.80	0.23 ± 0.04 $p < 0.001$‡	1352 ± 488 $p < 0.01$‡	6 (24%)
Salmonella	25	3.86 ± 0.71	9.32 ± 0.76	0.22 ± 0.05 $p < 0.01$‡	983 ± 244 $p < 0.05$‡	3 (12%)
Shigella	130	5.6 ± 0.29	8.85 ± 0.24	0.38 ± 0.02 $p < 0.001$‡	2021 ± 123 $p < 0.001$‡	42 (32%)

* B/N ratio = the ratio between band and band plus mature neutrophil count.
† All results are expressed as mean ± SEM.
‡ p Values calculated as compared to the nonbacterial group. Significant differences in the absolute band count were also found between the *Shigella* compared to the *Campylobacter* ($p < 0.02$), *Salmonella* ($p < 0.01$), and *E. coli* ($p < 0.001$) groups.

From the Department of Pediatrics, Frank A. Oski MD, Chairman; Peter C. Rowe MD, Chief Resident in Pediatrics, Children's Medical and Surgical Center, and Linda Clark, Librarian, Department of Pediatrics, The Johns Hopkins School of Medicine.

Effect of Breast Feeding on Size of Breast

While discussing breast feeding one morning, someone asked what consequences, if any, breast feeding had on the size of the breast.

A great deal of mythology and misinformation surrounds the cosmetic consequences of breast feeding. Textbooks make categorical statements suggesting that breast feeding has no ultimate effect on the size of the breast. If one asks women who have been pregnant, a different impression emerges. The following conclusions were obtained from a survey of 750 women.

Table 2. Women Reporting Change in Breast Size Six Months after Delivery or Termination of Nursing

Group	Percentage
Non-breast feeding	27.9
Breast feeding, 0–2 weeks	26.3
Breast feeding, 2–6 weeks	27.0
Breast feeding, 6 weeks–6 months	48.7
Breast feeding, more than 6 months	48.4

Types of changes Women who did not breast feed or those breast feeding for less than two weeks and noted a change:

	percent
Increase in breast size	60
Decrease in breast size	24
No change in size, less tone	16

Breast feeding for more than two weeks and noted a change:

	percent
Increase in breast size	14
Decrease in breast size	50
No change in size, less tone	36

Only three women among the group noting a change in breast size following breast feeding did not nurse their subsequent children. All thought the cosmetic consequences were of little significance when contrasted with the psychological and nutritional benefits of nursing [Oski, F.A. Program, American Pediatric Society, 1968, p. 58].

How Much Milk Does a Normal Infant Consume?

A three-month-old was admitted with bronchiolitis. During the history, it was learned that this 5 Kg infant was consuming 900 ml of formula per day. One of the residents at Morning Report expressed surprise at this seemingly large volume of intake.

How much milk will be taken by the normal term infant during the first half year of life? The data in Table 3 were compiled from a study of infants for whom milk was the sole source of nutrition. All were thriving. Note the marked variation observed in these babies.

Table 3. Volume of Milk Taken per Day (ml/kg)

	Intake Percentiles				
Age	10th	25th	50th	75th	90th
5–12 days	105	120	145	180	195
1 week–1 month	172	184	199	220	224
1–2 months	164	174	189	205	220
2–3 months	145	155	174	190	199
3–4 months	134	148	158	170	180
4–5 months	132	138	149	158	172

Fomon, S.J.; Owen, G.M.; and Thomas, L.N. *Am J Dis Child* 108:601 (1964).

FRANK A. OSKI MD
PETER C. ROWE MD
LINDA CLARK

Mammography

Mammography is the x-ray picture of the breasts. It has two major roles. The first is early detection of breast cancer in asymptomatic patients. The second is to determine whether a breast mass is highly suspicious for cancer, and more importantly, to detect other nonpalpable masses in the same and the opposite breast. This is of utmost importance in this era of segmental mastectomy as the primary management of some breast cancers.

An asymptomatic woman can take three steps to increase the chance of early detection of a primary breast tumor when it is small:

1. Learn how to perform self-examination of breasts and do it monthly. The ideal time is one week from the onset of menstrual period. If she has had a hysterectomy or is postmenopausal, self-examination can be done once a month when the breasts are not tender or congested.
2. Her family physician and/or gynecologist should examine her breasts annually.
3. Mammograms should be taken at regular intervals once she reaches the appropriate age.

Mammography has been reported to be the most accurate method for detecting breast cancer. Therefore, the American Cancer Society has made certain recommendations for early detection of breast cancer in asymptomatic women: between the ages of 35 and 40, women should have their first mammographic examination. This mammogram serves as a baseline for further comparison and rules out evidence of breast cancer at this time.

Risk of breast cancer is minimal before age 35, but it increases with age: over 75 percent of breast cancer occurs between ages 40 to 60. Therefore, after the age of 40, women should have the mammogram performed once every two years, except for those who are at high risk who should have it done annually. In addition to age, other high-risk factors include: strong family history of breast cancer, long menstrual history (menarche prior to age 12 and menopause after age 55), and those who have never been pregnant or became pregnant for the first time after age 30. Other risk factors include obesity and hypertension.

New technology has enabled major advances in mammography. The radiation doses have been lowered substantially to four to ten times less than previously. This, combined with better imaging techniques, promotes excellent visualization of details not seen with conventional mammography. In addition, the new Magnification Mammograms produce sharper and more detailed imaging, expressing trabecular architectural distortion and microcalcification better than the conventional mammograms. Such imaging techniques allow the radiologist a more definite benign or malignant interpretation. Magnification mammography units will become widely available, but it should not be used for all screening or in place of the conventional technique. It is to be used to delineate cancers that are not otherwise detectable by the conventional method and are interpreted as equivocal.

Thermography never has become well-established in this country as a breast cancer detection tool. It is not as effective as mammography in finding very small lesions. If it is used, it should be in conjunction with mammography and physical examination but not as a substitute for either. Therefore, it involves a substantial expense for a very small additional percentage yield in the detection and diagnosis of breast cancer.

Sonography can complement mammography and physical examination in a very specific circumstance, for example, when a lesion cannot be positively identified as a cyst by either physical exam or mammography. Sonography is easy to do and is not invasive.

It is time to reduce the cost of mammography for the asymptomatic women who need screening. This may encourage more women to seek screening for breast cancer. It is understandable that symptomatic women require more radiologic films and closer involvement with the radiologist; the process should be more costly. However, this expense should not be passed on to the asymptomatic women who are seeking screening.

Tumor Conferences are held weekly on Fridays between 8–9 a.m. in Room N13E28 at the University of Maryland Hospital. This is an open meeting and physicians are welcome to attend. Physicians can present cases; but please call 528-5224 before Friday to obtain time on the schedule for your case(s) and bring the pathological slides with you.

E. GEORGE ELIAS **MD**
Professor of Surgery
Director, Surgical Oncology Program
University of Maryland

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

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Smoking
Part II: The Physician's Impact on Smoking Behaviors

DAVID S. PRINCE MD and PETER B. TERRY MD

In the second of a series concerning smoking, *Commentary* emphasizes the impact the physician can make on the smoking behaviors of his or her patients and provides a simple, straightforward method to use in dealing with patients.

Dr. Prince is Instructor and Dr. Terry is Associate Professor, The Johns Hopkins School of Medicine, Department of Medicine.

Cigarette smoking poses a major health threat to the 70 million Americans who remain active smokers. The previous article in this series discussed the economic and health costs of cigarette smoking both to the individual and to society. The goals of this article are to provide a general overview of smoking cessation programs and techniques currently available and to provide specific methods that can be used in the physician's office to help patients quit. Physicians can play a major role in the promotion of smoking cessation.

Most Smokers Want to Quit

The steady decline in the prevalence of cigarette smoking since the publication of the first Surgeon General's report in 1964 (as well as the results of a number of national surveys) indicate that millions of smokers have quit and that a substantial portion of these former smokers have remained abstinent for many years.[1] Furthermore, 90 percent of current smokers wish to quit, and the majority have tried to quit several times.[2]

Motivational factors prompting smokers to quit are varied and diverse: health problems; pressure from spouse, children, friends, or coworkers; the cost of cigarettes; fear of adverse health consequences; concern for the health of children or that they may become smokers; the physical unattractiveness of smoking; and the desire for social acceptance.[2] A personalized approach to each patient is most useful and should take into account social, cultural, ethnic, and occupational factors.[3] Unfortunately, patients are more receptive to counseling at the time of illness than to counseling about prevention; for instance, patients who have suffered a myocardial infarction are especially amenable to giving up cigarettes.[4] Physician visits for acute respiratory tract infections also offer good opportunities to counsel smoking cessation.[5]

The Physician's Role

Although the vast majority of former smokers have quit without the help of an organized program or method,[2] many have acted on the advice or warning of a physician. Health professionals uniformly underestimate their ability to influence patients to give up smoking. In a 1983 survey of 433 primary care physicians in Massachusetts, Wechsler[6] found that 90 percent routinely ask patients about smoking, 58 percent were prepared to counsel patients about smoking, but only 3 percent were confident of the success of their efforts.

Physician advice can achieve long-term smoking abstinence. The degree of success is related not only to whether the patient is seeking advice to quit and the concern for underlying health problems but also to the duration of the physician's time commitment. Brief (60 to 120 *seconds*), direct, and unambiguous advice to quit smoking by a general practitioner can induce 19 percent of smokers to attempt to quit and can achieve a sustained abstinence for one year of 4 to 5 percent.[7,8] While not dramatic, this minimal intervention would effectively produce 3 to 3.5 million ex-smokers if applied to the 70 million active smokers in the United States. If the physician extends smoking cessation counseling to 15 to 30 minutes, explaining risk factors and showing the patient the personal rather than the statistical benefits, at least twice as many patients will achieve long-term abstinence.[9] One year cure rates of 27 percent have been achieved with the addition of nicotine gum and three follow-up visits within the first month during physician counseling.[10]

Physician counseling should focus on providing specific step-by-step instruction on how to stop smoking, since this is the method preferred by patients. In a survey conducted by a smoking control research project on the willingness of individuals to accept 10 smoking withdrawal methods, detailed instructions received the highest positive response of any method.[11] Personal instruction received a 69 percent favorable response as compared to 36 to 42 percent for hypnosis, lectures, tranquilizers, group discussion, and clinics.

Treating the Addiction

Cigarette smoking fulfills all the conditions necessary to classify as an addictive behavior. Furthermore, nicotine fulfills the necessary pharmacologic criteria for being a drug of abuse, and as such its elimination is associated with a well-defined withdrawal syndrome.[12] A number of carefully designed controlled clinical trials have shown that, when properly used, nicotine gum (Nicorette) may be an effective adjunct to smoking cessation both in the physician's office and in special-

HBP Commentary is contributed by the Maryland Commission on High Blood Pressure and Related Cardiovascular Risk Factors, 201 W. Preston St., Baltimore, MD 21201 (301-225-5891). Editors: R. Patterson Russell MD, Past Chairman; Donald O. Fedder PharmBS, DrPH, Chairman; and Carol Lewis MPH, ScD, Executive Director.

ized smoking cessation treatment programs.[13,14] The more comprehensive the program to modify smoking behavior, the more effective is the use of nicotine gum. If nicotine gum is prescribed to help patients tolerate the physiological effects of withdrawal, patients should understand that it has no effect on the psychological dependency of smoking and only "buys time" to develop new coping behaviors.

Smoking Cessation Programs

Organized smoking cessation programs are quite diverse in approach, duration, and effectiveness, and may add support to the physician's counseling. Most groups involve 8 to 15 smokers led in a structured program by an experienced group leader.[1] The majority of these programs combine education with behavioral techniques designed to reduce the urge to smoke. Unfortunately, the use of these methods has not been validated in a scientific manner in randomized clinical trials with adequate outcome data.

Behavioral techniques commonly used by smoking cessation programs are listed in the Table. *Self-monitoring* is described below. *Sensitization* programs rely on aversive conditioning, while *desensitization* approaches attempt to reduce the urge to smoke in response to anxiety and distress. *Contracting* involves a deposit of money to be returned to the smoker only if abstinence can be accomplished for a prearranged length of time. Although *hypnosis and acupuncture* have appeal for many patients, they are costly and there is no evidence that they are any more successful than other techniques.

A 5-Step Behavioral Modification Method for Office Use

The following example of a simple five-step behavioral modification method can be used effectively in the physician's office to help patients who wish to quit smoking. Patients should be seen frequently in follow-up visits to provide support and monitor progress. *The patient has learned to smoke. He/she can learn not to smoke.*

1. **Prepare the patient to quit** Have the patient pick a specific date about two weeks before he or she plans to quit completely. He/she should tell significant others (wife, husband, close friends, coworkers) of the specific date.

Table. Smoking Cessation Program Techniques

Behavioral techniques
Self-monitoring (smoking diaries)
Sensitization (aversion therapy)
Desensitization (stimulus control)
Contracting
Hypnosis
Acupuncture

2. **Help the patient understand when and why he/she smokes** To do this, have the patient keep track of each cigarette smoked (when and under what circumstances). This should be written on a piece of paper kept with the cigarettes. For example, *7 a.m. After breakfast. Habit with newspaper to help me relax.* Doing this for a week brings the behavior into conscious focus and teaches something about when and why the person smokes.

3. **Help the patient plan ahead for when he/she no longer smokes** By reviewing the piece of paper on which smoking behavior is recorded, the smoker can see when he/she is smoking out of habit. He or she needs to change the normal routine associated with the habit and to have a plan *before* quitting. For example, if the smoker normally has a cigarette after breakfast with a cup of coffee, on and after the quit date he/she should plan to change to orange juice after the meal or to skip the coffee and go for a short walk.

At other times the smoker may recognize that he/she smokes to allay anxiety or stress. He/she should prepare an alternative coping strategy for times of stress after the quit date. Examples would be deep breathing exercises (good for anxiety) or isometric exercises (good for stress). If one alternative doesn't work, another might.

4. **Instruct the patient to prepare for success** Throw away cigarettes, matches, and other smoking paraphernalia the night before quitting. Remove ash trays at home and at work. Smokers who have quit should give themselves a reward after one or two weeks of not smoking. (This does not include a cigarette!)

5. **Give directions to avoid common problems**
- Don't try to cut down gradually.
- Stop completely.
- Don't substitute cigars or pipes.
- Eat foods that are low in calories and nutritious as substitutes for smoking.

The above method includes important behavioral modification principles. A more comprehensive review of smoking cessation methods is included in the Surgeon General's Report of 1979.[15] The next article in this series will give additional suggestions on counseling patients and about materials and programs available to support and reinforce the physician's efforts to help patients quit smoking.

References

1. Fielding, J.E. "Smoking: Health Effects and Control." *N Engl J Med* 313(1985): Part II:555–61.
2. Department of Health and Human Services. *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention 1979*, Rockville, MD.
3. Glum A. "Butting in Where It Counts." *Hosp Phys* 16(1980):22–35.
4. Pederson, L.L. "Compliance with Physician Advice to Quit Smoking: A Review of the Literature." *Prev Med* 11(1982):71–84.
5. Schwartz, J.L. "Myths and Realities of Smoking Cessation." *NY State J Med* 83(1983):1355–57.

6. Wechsler, H.; Levine, S.; Idelson, R.K.; *et al.* "The Physician's Role in Health Promotion - A Survey of Primary Care Practitioners." *N Engl J Med* 308(1983):97–100.

7. Russell, M.A.H.; Wilson, C.; Taylor, C.; Baker, C.D. "Effect of General Practitioners Advice Against Smoking." *Br Med J* 3(1979): 231–35.

8. Jamrozik, K.; Vessey, M.; Fowler, G.; *et al.* "Controlled Trial of Three Different Anti-Smoking Interventions in General Practice." *Br Med J* 288(1984):1499–1503.

9. Rose, G.; Hamilton, P.J.S.; Colwell, L.; *et al.* "A Randomized Controlled Trial of Anti-Smoking Advice: 10-Year Results." *J Epidemiol Community Health* 36(1982):102–108.

10. Fagerstrom, K.O. "Effects of Nicotine Chewing Gum and Follow-up Appointments in Physician Based Smoking Cessation." *Prev Med* 13(1984):513–27.

11. Schwartz, J.L.; Dubitzky, M. "Expressed Willingness of Smokers to Try 10 Smoking Withdrawal Methods." *Public Health Rep* 83(1967):855–61.

12. Henningfield, J.E. "Behavioral Pharmacology of Cigarette Smoking." *Adv Behav Pharmacol* 4(1984):131–210.

13. Russell, M.A.H.; Merriman, R.; Stapleton, J.; Taylor, W. "Effect of Nicotine Chewing Gum as an Adjunct to General Practitioners: Advice Against Smoking." *Br Med J* 287(1983):1782–85.

14. Hall, S.M.; Tunstall, C.; Rigg, D.; *et al.* "Nicotine Gum and Behavioral Treatment in Smoking Cessation." *J Consult Clin Psychol* 53(1985):256–58.

15. Department of Health, Education, and Welfare. *Smoking and Health: A Report of the Surgeon General, 1979.* Washington, DC.

Today's Psychiatry

New Concepts and Treatments for Anxiety

LINO COVI MD

An almost universal symptom in ambulatory medical patients at their initial office visit is that of anxiety. This anxiety may be well justified by apprehension about the seriousness of the subjective complaint for which medical attention is sought. Pathological anxiety is sometimes better defined by the ability of the individual to cope with it rather than by its intensity. The wide use of antianxiety medications from barbiturates to meprobamate to benzodiazepines testifies to modern man's expectation of controlling anxiety promptly and without excessive effort.

Since the 1970s, we have become increasingly aware of the risk of habituation in even moderate (but continuous) use of antianxiety agents. This awareness has led to classifying barbiturates and benzodiazepines as "controlled substances" by the federal government. Some benzodiazepines (for example, chlordiazepoxide) have been known to give problems of habituation at moderate dosages of 45 mg per day if taken daily for 16 weeks.[1] Switching to another benzodiazepine or to phenobarbital does not prevent habituation because of the cross-tolerance phenomenon that derives from the similar mechanisms of action of all such substances.

Some recent research has indicated the importance of the noradrenergic nucleus locus ceruleus as a relay center for a warning or "alarm" system that includes normal and pathological anxiety during high levels of activation.[2] The efferent pathways from the locus ceruleus include most of the areas responsible for the physiological response to pain and fear. Pathways to and from the cerebral cortex provide the feedback loops that explain the cognitive triggering of anxiety. Most of the drugs effective in anxiety decrease neuronal activity in the locus ceruleus through a variety of mechanisms. The role of the locus ceruleus in normal fear, as well as in pathological anxiety, indicates the common ground of normal and pathological anxiety and the risk that overtreating anxiety may compromise adaptive "alarm" systems. The fact that some benzodiazepines like alprazolam are effective in panic anxiety while others are not, and that tricyclic antidepressants like imipramine and doxepin are also effective in anxiety, indicate the heterogeneous nature of anxiety. The locus ceruleus is not the sole system involved in anxiety as shown by the fact that a new effective antianxiety agent, buspirone, does not decrease the neuronal activity of that nucleus.

This new information should remind us of the many facets of anxiety and of the often useful adaptive function of it. Whether normal or pathological, anxiety is often manageable by psychological means (such as reassurance and psychotherapy) so that drug treatment may not always be the only available choice.

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

References

1. Covi, L.; Lipman, R.S.; Pattison, J.H.; Derogatis, L.R.; and Uhlenhuth, E.H. "Length of Treatment with Anxiolytic Sedatives and Response to their Sudden Withdrawal." *Acta Psychiatr Scand* 49(1973):51–64.

2. Redmond, D.E. Jr. "Neurochemical Basis for Anxiety and Anxiety Disorders: Evidence from Drugs which Decrease Human Fear and Anxiety." In *Anxiety and the Anxiety Disorders.* Tuma, A.E. and Maser, J. eds. Hillsdale, NJ: Lawrence Erlbaum Associates, 1985.

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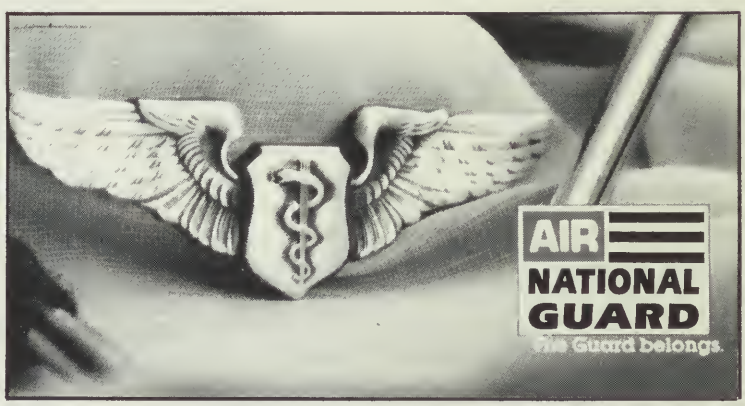
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OCTOBER 1986

1986-1987 INFLUENZA VACCINE RECOMMENDATIONS

Annual vaccination with inactivated influenza vaccine is considered the single most important measure to prevent or to lessen the severity of influenza infection and is strongly recommended for high-risk groups.

This year's trivalent influenza vaccine is composed of A/Chile/1/83 (H1N1), A/Mississippi/1/85 (H3N2), and B/Ann Arbor/1/86. For persons 12 years of age and younger, two doses of the split virus product (separated by at least 4 weeks) are recommended unless at least one dose of influenza vaccine was received from 1978-1979 to 1985-1986; in which case, one dose of vaccine is sufficient this year. Persons 6 months of age through 35 months should receive a reduced dosage of 0.25 ml; otherwise, the usual 0.5 ml is recommended. No one under 6 months of age should receive the vaccine. Persons greater than 12 years of age should receive one dose of either the whole or split virus product.

In addition to the trivalent influenza vaccine, a monovalent influenza vaccine composed of A/Taiwan/1/86 (H1N1) will be available at a later date (November-December 1986) and is also recommended for high-risk groups during the 1986-1987 influenza season for protection against a newly emerged variant of influenza that has caused influenza outbreaks in Asia during March-May 1986. In general, anyone who received the trivalent vaccine is a candidate for the monovalent vaccine. The monovalent vaccine is especially recommended for those persons under 35 years of age, however.

At least 4 weeks should separate the administration of the trivalent and monovalent influenza vaccines if they are not given simultaneously at different sites.

The groups that are at greatest medical risk of influenza-related complications are the following:

. .Adults and children with chronic disorders of the cardiovascular or pulmonary systems that are severe enough to have required regular medical follow-up or hospitalization during the preceding year.

. .Residents of nursing homes and other chronic-care facilities (i.e., institutions housing patients of any age with chronic medical conditions).

Other groups at moderately increased risk of serious illness include the following:

. .Otherwise healthy individuals 65 years of age or older.

. .Adults and children with chronic metabolic diseases (including diabetes mellitus), renal dysfunction, anemia, immunosuppression, or asthma, that are severe enough to require regular medical follow-up or hospitalization during the preceding year.

. .Children receiving long-term aspirin therapy, who may be at risk of developing Reye syndrome following influenza infection.

Other groups who are potentially capable of nosocomial transmission of influenza to high-risk persons include the following:

. .Physicians, nurses, and other personnel who have extensive contact with high-risk patients (e.g., primary-care and certain specialty clinicians, staff of intensive-care units, particularly neonatal intensive-care units).

. .Providers of care to high-risk persons in the home setting (e.g., family members, visiting nurses, volunteer workers).

There is a considerable overlap in the target groups for influenza and pneumococcal vaccination. Pneumococcal and influenza vaccines can be given at the same time at different sites without increased side effects, but it should be emphasized that, whereas influenza vaccine is given annually, pneumoccocal vaccine should be given only once.

The only drug currently approved in the United States for the specific prophylaxis and therapy of influenza is amantadine hydrochloride (Symmetrel). Amantadine prophylaxis is particularly recommended to control presumed influenza A outbreaks. The drug should be given as early as possible after recognition of an outbreak in an effort to reduce the spread of the infection. Amantadine prophylaxis is also recommended in the following situations:

. .As an adjunct to late immunization of high-risk individuals.

. .To reduce spread of virus and maintain care for high-risk persons in the home setting.

. .For immunodeficient persons.

. .For persons for whom influenza vaccine is contraindicated.

SEE INFLUENZA VACCINE CHART ON NEXT PAGE

SOURCE: MMWR/May 23, 1986/Vol. 35/No. 20, Prevention and Control of Influenza, ACIP Recommendations;
MMWR/August 15, 1986/Vol. 35/No. 32, Monovalent Influenza Vaccine, 1986-1987, ACIP Recommendations.

AGE	INFLUENZA VACCINATION STATUS		ADDITIONAL VACCINATIONS
	Any Influenza Vaccine 1978/1979-1985/1986	Doses of 1986/1987 Trivalent Vaccine Received	Vaccination Schedule* for Future 1986/1987 Vaccination
6 mos.–12 yrs.	NO (unprimed)	NONE	Trivalent + monovalent simultaneously in 2 sites on each of 2 visits ≥ 4 wks. apart
		1	Trivalent + monovalent simultaneously in 2 sites ≥ 4 wks. after 1st trivalent
		2	Monovalent ≥ 4 wks. after trivalent
	YES (primed)	NONE	Trivalent + monovalent simultaneously in 2 sites
		1	Monovalent ≥ 4 wks. after trivalent
≥ 13 yrs.	DOESN'T MATTER	NONE	Trivalent + monovalent simultaneously in 2 sites
		1	Monovalent ≥ 4 wks. after trivalent

*If monovalent vaccine is not available when trivalent vaccine is scheduled, do not delay administration of trivalent vaccine. After at least one dose of the trivalent vaccine has been administered, only one dose of the monovalent vaccine will be needed. This may be given either simultaneously with the scheduled second dose of trivalent vaccine for a child receiving two doses of trivalent vaccine or 4 weeks or more after the last dose of trivalent vaccine administered.

SYPHILIS DIAGNOSIS CRITERIA
(Continued from September Newsletter)

A. DIAGNOSIS:

Criteria for primary syphilis

1. The diagnosis of primary syphilis is definite if **Treponema pallidum** is demonstrated by darkfield microscopy or by Direct Fluorescent Antibody Stain for **T. pallidum** (DFATP) in material from a chancre or aspirate from a regional lymph node. **NOTE:** Commensal spirochetes found in the oropharynx may be mistaken for **T. pallidum** in darkfield microscopy when examining material from the oral cavity; therefore, such spirochetes should be confirmed by DFATP.

2. A presumptive diagnosis of primary syphilis is made when patients have one or more typical lesions (chancres) and:

   a. Reactive nontreponemal tests but no previous history of syphilis or reactive nontreponemal tests.

   b. The titre of the present nontreponemal in test is $\geq$ 4-fold than the last test.

   c. They have appeared within 10-90 days of exposure to a partner with definitive or presumptive diagnosis of primary, secondary, or early latent syphilis.

3. The diagnosis of primary syphilis is suggested by a lesion resembling a chancre at a site of sexual exposure and a characteristic clinical course, regardless of the result of the nontreponemal test.

NOTE: Many patients with genital lesions apply topical substances to their lesions prior to seeking professional evaluation. These preparations may produce a negative darkfield examination even though the patient has primary syphilis. In such cases, the darkfield examination should be repeated one and two days after discontinuing all such preparations in an effort to establish a definitive diagnosis.

Criteria for secondary syphilis

1. A definitive diagnosis of secondary syphilis can be made only in patients with positive nontreponemal serologic tests. Darkfield microscopic (or FA) demonstration of **T. pallidum** in material from skin lesions or lymph nodes confirms the diagnosis.

2. A presumptive diagnosis of secondary syphilis applies to patients with signs of secondary syphilis (see Table 1) and either a newly reactive serologic test or a $\geq$ 4-fold increase in titer over the last known nontreponemal test.

TABLE 1. Typical Signs of secondary Syphilis: (One or more may be present)

Bilaterally symmetrical macular, papular, follicular, papulosquamous, or pustular skin lesions.
Alopecia (without scar formation).
Loss of eyelashes and lateral third of the eyebrows.
Iritis.
Condylomata lata (moist papules, usually in anogenital region or mouth).
Mucous patches of the oropharynx or cervix.
Generalized lymphadenopathy.
Fever and malaise.
Splenomegaly.

---

3. A small percentage of patients with secondary syphilis may have a nonreactive nontreponemal test because of a prozone phenomenon. A prozone reaction occurs in nontreponemal tests when an excess amount of anticardiolipin (reaginic) antibody interferes with the test result. This inhibitory effect of excess antibodies can be overcome by diluting the serum and repeating the nontreponemal test.

Criteria for patients previously treated for syphilis

To establish a new diagnosis of syphilis in patients previously treated, either the darkfield (or FA) exam must be positive (definitive diagnosis), or there must be a 4-fold increase in a quantitative nontreponemal titer (presumptive diagnosis).

Criteria for early congenital syphilis

1. Early congenital syphilis is diagnosed definitively when **T. pallidum** is demonstrated by darkfield (or FA) examination of material from nasal disharges or skin lesions of a neonate.
2. A presumptive diagnosis applis to any infant in whom a $\geq$ 4-fold increase in titer over the infant's previous titre is demonstrated. A presumptive diagnosis is made in symptomatic neonates with reactive nontreponemal tests if their mothers were not adequately treated for syphilis.

NOTE: If the neonate is asymptomatic, has a positive serology, and the mother was not adequately treated for her infection with penicillin, the baby should be treated without awaiting criteria for a presumptive diagnosis.

SOURCE: Quality Assurance Guidelines for STD Clinics - 1986

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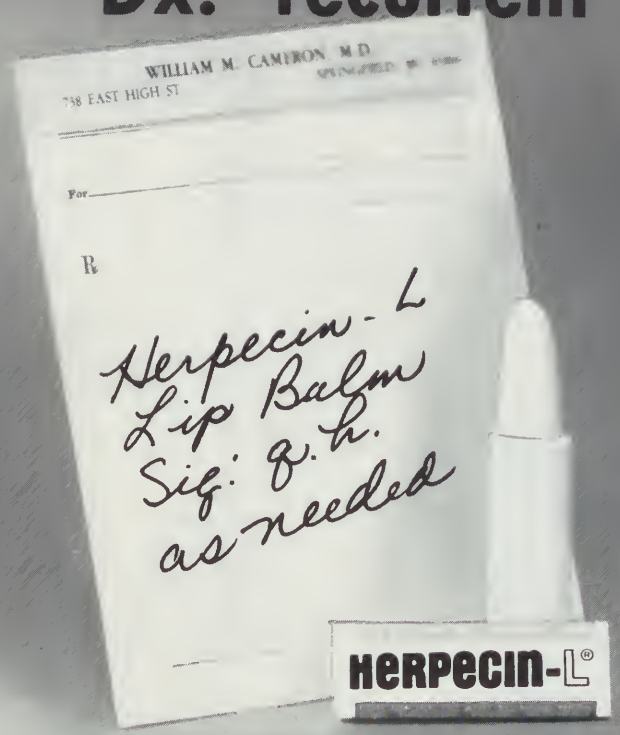
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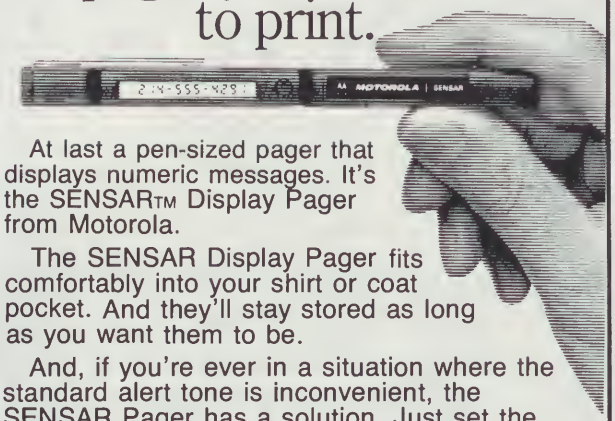
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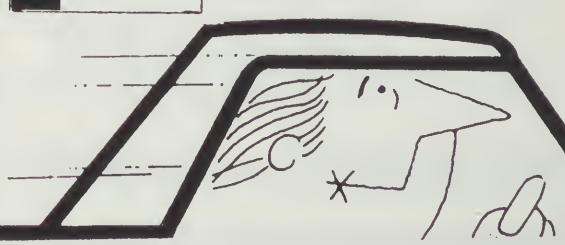
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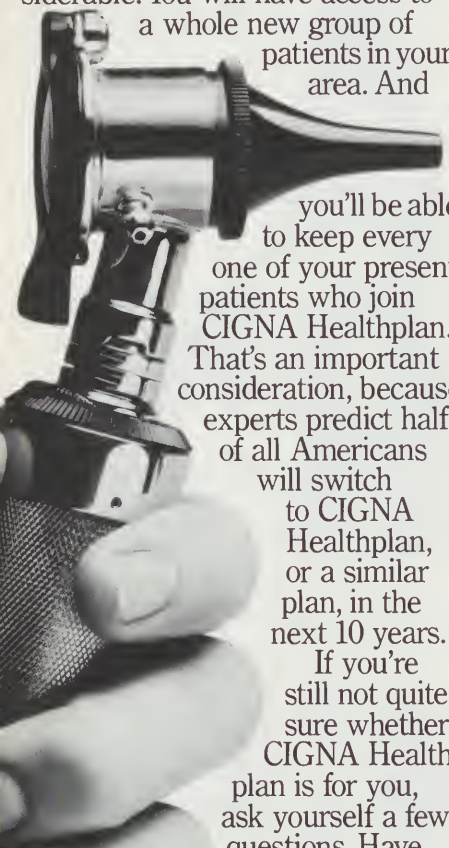
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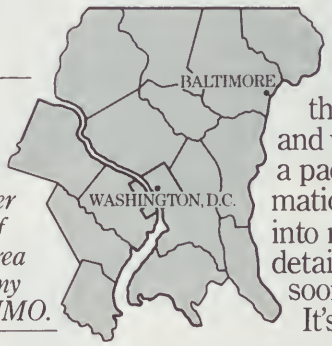
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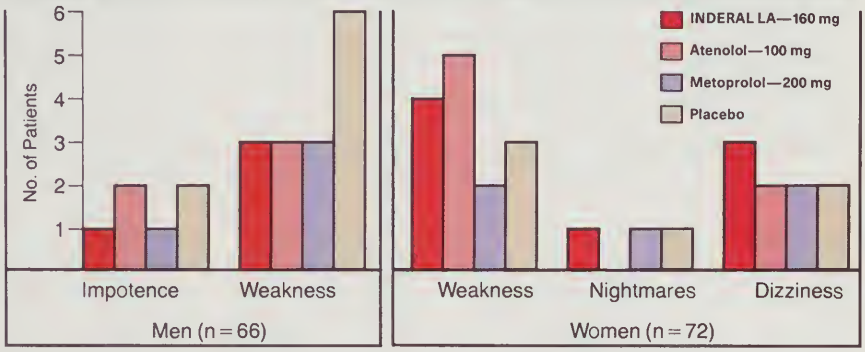
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INDERAL LA and INDERIDE LA Capsules should not be considered simple mg-for-mg substitutes for INDERAL and INDERIDE Tablets. Please see package circulars.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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REFERENCE:

1. Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321–1323.

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Epidemiology of Sentinel Birth Defects in Maryland, 1984

MUIN J. KHOURY MD, ALYSE WEINSTEIN MA, SUSAN R. PANNY MD, NEIL A. HOLTZMAN MD, PAMELA K. LINDSAY PD, F. JEAN WARTHEN PhD, NANCY A. STREET BA, MARION O. ROBERTSON MA, KATHERINE P. FARRELL MD, and MAX EISENBERG PhD

The Maryland Birth Defects Reporting and Information System (BDRIS), a monitoring program in operation since September 1983, seeks to establish incidence rates of 12 sentinel defects in Maryland, to monitor their trends in relationship to environmental hazards, and to inform families of affected infants about available medical and social services. Through a mandatory reporting law, BDRIS ascertains the defects diagnosed at birth among live and stillborn infants. Although in 1984 the completeness of reporting of such defects was better than that of vital records (birth and fetal death certificates), at least 20 percent underreporting exists, especially in the National Capital area, where many cases are lost to DC hospitals. We hope this article will remind the Maryland medical community to fulfill its obligations in reporting sentinel defects. With improved reporting, BDRIS data can be useful in the identification of environmental and occupational teratogens especially if used in conjunction with the Maryland Toxic Substances, Occupational Disease, and Cancer Registries.

Khoury is now at the Center for Environmental Health, CDC, Atlanta. Weinstein, Lindsay, Street, Farrell, and Eisenberg are with the Science and Health Advisory Group, Maryland DHMH. Panny and Robertson are with the Division of Hereditary Disorders, Maryland DHMH. Holtzman is in the Department of Pediatrics, The Johns Hopkins Hospital, and Warthen is at the Center for Health Statistics, Maryland DHMH.

Reprints: Science and Health Advisory Group, Maryland Department of Health and Mental Hygiene, 201 W. Preston St., Baltimore, MD 21201. **Correspondence:** Dr. Susan Panny, Division of Hereditary Disorders, Maryland Department of Health and Mental Hygiene, 201 W. Preston St., Baltimore, MD 21201.

Following the thalidomide tragedy, birth defects monitoring programs (BDMP) proliferated in many parts of the world, including the United States.[1] In 1967, the Centers for Disease Control (CDC) started a BDMP in Metropolitan Atlanta and in 1974 initiated the first nationwide monitoring system.[2] Both systems have been used by CDC to "monitor regularly and systematically the births of malformed infants for changes in incidence or other unusual patterns suggestive of environmental influences."[2] In addition, the Atlanta system has been used as a case registry for follow-up epidemiologic and genetic investigations of the etiology of congenital malformations.[3-5] In 1974, the International Clearinghouse for Birth Defects Monitoring Programs (ICBDMP) was created[6] as "a communication network to share information about changes in the incidence of specific birth defects, the appearance of suspected teratogens, and other intelligence relevant to the detection and investigation of possible outbreaks of congenital malformations."[7] ICBDMP has been pooling data from at least 22 countries and was used for several collaborative studies of teratogenic agents.[1] In 1979, the EUROCAT project was started to establish registries of congenital malformations in each country in the European Economic Community.[8]

The tremendous interest in BDMP in this country and abroad has been greatly stimulated by the growing concerns about possible teratogenecity of drugs, and of environmental and occupational exposures during pregnancy.[1] These concerns are reflected in the legislative activities in many states in the United States to establish local monitoring programs. At least 11 states have passed laws either requiring reporting of birth defects or giving state agencies access to medical records.[1]

This article summarizes data from the newly established Maryland Birth Defects Reporting and Information System (BDRIS), in operation since September of 1983. We report patterns of occurrence of 12 sentinel defects throughout Maryland by relevant demographic variables as well as efforts to assess the completeness of ascertainment of defects by the Maryland registry.

Methods

The Maryland BDRIS, established by the Maryland General Assembly in 1982, began data collection in September 1983. The purpose of the law was to establish a mechanism for the reporting of 12 sentinel defects to determine their incidence in the Maryland population, to develop procedures to monitor trends in rates of these defects in relation to environmental hazards, and to make available to families of affected infants information on the defects and the services that can be provided.

The 12 defects reported to BDRIS are anencephaly, spina bifida, hydrocephalus, cleft lip with or without cleft palate, cleft palate, esophageal atresia/tracheoesophageal fistula, rectal/anal atresia, reduction and deformities of the upper limb, reduction and deformities of the lower limb, hypospadias, congenital dislocation of the hip, and Down syndrome. This list of birth defects was chosen by the World Health Organization

(WHO) because they usually can be diagnosed at birth, because they occur in virtually all ethnic groups, and because there is a name for each of these defects in every language with a significant medical literature. The ICBDMP collects data on this group of defects.[6,7] "Sentinel" means to watch wisely. WHO hopes that trends in the incidence of the 12 sentinel defects will reflect trends in the incidence of birth defects in general. (WHO also has a list of "sentinel" single gene disorders that are used as indicators of the spontaneous mutation rate. The two lists should not be confused.)

Sentinel defects must be reported in Maryland if diagnosed or suspected at the time of birth (for both live and stillbirths over 500 grams or 20 weeks) within five days of birth. The law technically applies only to births that occur within Maryland. Infants with sentinel defects born to Maryland residents outside the state (mostly in Washington, DC) are poorly or un-reported to BDRIS but will be better reported in the near future, as DC is planning to establish its own monitoring system, which will permit data exchange between the two systems.

The special reporting form consists of three parts: the evaluation of the defect as made by the attending pediatrician, the obstetrical information page filled out by the attending obstetrician, and information obtained from medical records and personal interview with parents, usually by an obstetric or newborn nursery nurse. Data collected include demographic information, birth weight, gestational age, parity, maternal age, pregnancy complications, maternal illnesses and drug exposures, cigarette smoking during pregnancy, vitamin intake, occupational history on both parents, and family history of birth defects in first degree relatives.

The law has a strong confidentiality portion restricting the Maryland Department of Health and Mental Hygiene from accessing the name of the affected child and other identifying information on the family unless parents consent to release such data or the Department can show a public health need for such information. While this law limits routine follow-up of cases not giving consent, it does not affect the ability to monitor incidence rates since affected infants still must be reported to the Department even without identifying information. Moreover, about 70 to 75 percent of parents consent to the release of their names.

Analysis of 1984 Data

We summarize data for a completed calendar year of BDRIS reporting (January 1 through December 31, 1984) during which about 56,000 infants were born in Maryland to Maryland parents. Information presented pertains to reported rates of the 12 sentinel defects. Infants born in Maryland but whose parents do not reside in Maryland are excluded from this analysis. Likewise, infants with sentinel defects born outside Maryland, whose parents reside in Maryland, are not included since there is marked underreporting of such cases. It was ascertained that 295 infants were born with one or more sentinel defects. Incidence rates are reported by race, sex, plurality, maternal age, birth order, county of residence at birth, month of birth, birth weight, and gestational age. Denominator data were obtained on the number of Maryland births to Maryland residents from the Center for Health Statistics at the Department of Health and Mental Hygiene, and were broken down by the relevant demographic variables.

Since the system is new, it was important to evaluate the completeness of reporting to BDRIS. This was done by comparing ascertainment of defects via BDRIS with that via Maryland vital records (births and fetal deaths). All vital records filed in 1984 with a "yes" code on congenital malformations were reviewed to identify the 12 defects reported to vital records and to examine whether the same infants were reported to BDRIS. Because identifying information is not available on about 30 percent of records in BDRIS, indirect ways of matching the two systems were used including date of birth, hospital of birth, race, sex, and defect.

Since this analysis cannot identify infants with defects not reported to either system, the extent of underreporting could be higher than estimated here. Furthermore, we compared Maryland BDRIS rates with the CDC nationwide system rates for 1984.[9] The two systems have a similar reporting mechanism in that only infants diagnosed at birth are reported and both systems rely on reports from hospitals. Although regional differences in rates of sentinel defects can exist, this comparison should provide a crude estimate of the amount of underreporting in Maryland.

Results

Rates of Defects by Area of Residence Figure 1 displays reported rates (grouped by tertiles) of all sentinel defects combined (infants with one or more defects) by county of residence at birth. It can be seen that counties around the National Capital area have generally lower rates (lowest tertile) for all defects combined than other counties in the state. This is thought to be due to underreporting of defects in that area because many affected infants born in DC hospitals do not get reported to Maryland BDRIS. Table 1 shows the reported incidence rates of individual sentinel defects by area of residence at birth. Data are displayed by major political subdivision for individual defects rather than on the

basis of county of residence (total of 24 counties) because of the small number of observations in each county. Several fluctuations in rates are seen between various areas. Although some of the observed regional differences could be real, it was thought that because of small numbers, more data need to be accumulated to establish stable baseline rates of these defects and to assess both geographic differences and temporal differences within the same area.

Completeness of Ascertainment of Sentinel Defects A comparison of ascertainment of defects through BDRIS with that from vital records is shown in Table 2, next page. For most defects, BDRIS ascertains more cases than does vital records. Overall, while 21.8 percent of the infants are missed by BDRIS and captured by vital records, 45.4 percent of infants are missed by vital records but captured by BDRIS. However, for severe and easily diagnosable conditions at birth such as anencephaly and spina bifida, ascertainment is about the same in each system (slightly worse in BDRIS for anencephaly). The percent of underreporting to BDRIS varies by defect. For example, 33.3 percent of anencephalics were reported to vital records but missed by BDRIS, while no cases of limb anomalies reported to vital records were missed by BDRIS. This analysis relies on the assumption that the two systems combined ascertain all cases. This is unlikely to be true since some cases may be missed by both BDRIS and vital records. Therefore, the amount of underascertainment reported here may be an underestimate.

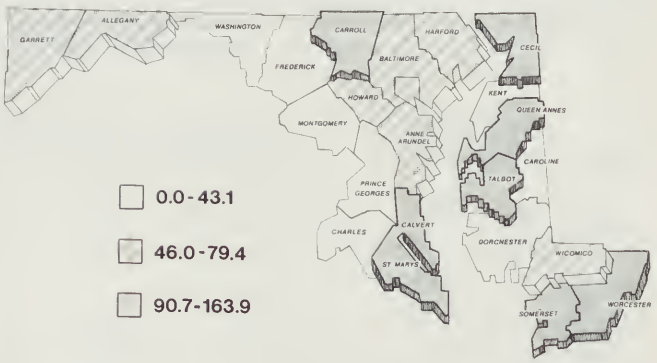


Figure. Reported rates (per 10,000 live births) of infants born with one or more sentinel defects by county of residence at birth, Maryland Birth Defects Reporting and Information System, January 1, 1984 to December 31, 1984. Rates are grouped by tertiles.

Table 3, next page, compares rates of sentinel defects in Maryland with rates of the same defects ascertained by the CDC nationwide monitoring program. Although regional differences in the true rates between Maryland and the rest of country do exist, because of the similar nature of ascertainment in both systems (reporting from hospitals of infants diagnosed at birth), it was thought such a comparison could reveal any gross underreporting of cases in Maryland. As shown in Table 3, for most defects, rates in Maryland are somewhat

Table 1. Reported Incidence Rates*: Sentinel Birth Defects by Geographical Area, 1984

Sentinel Defect	Maryland State (N = 55,956)		Northwest Area (N = 4,417)		Balto Metro Area (N = 32,251)		Nat'l Capital Area (N = 12,804)		Southern Area (N = 2,818)		Eastern Shore (N = 3,936)	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total with sentinel defects	295	52.7	17	41.0	190	58.9	38	29.7	17	60.3	33	83.8
Anencephaly	22	3.9	—	—	15	4.7	5	3.9	1	3.5	1	2.5
Spina bifida	28	5.0	—	—	17	5.3	7	5.5	1	3.5	3	7.6
Hydrocephalus w/o spina bifida	17	3.0	1	2.4	11	3.4	1	0.8	—	—	4	10.2
Cleft lip w/or w/o palate	28	5.0	3	7.2	16	5.0	5	3.9	1	3.5	3	7.6
Cleft palate	26	4.6	3	7.2	13	4.0	5	3.9	4	14.2	1	2.5
Esophageal atresia	8	1.4	—	—	7	2.2	—	—	1	3.5	—	—
Rectal/anal atresia	6	1.1	—	—	3	0.9	1	0.8	1	3.5	1	2.5
Reduction deformity												
Upper limb	24	4.3	3	7.2	15	4.7	6	4.7	—	—	—	—
Lower limb	31	5.5	4	9.6	19	5.9	7	5.5	1	3.5	—	—
Other limb anomalies	18	3.2	—	—	11	3.4	1	0.8	1	3.5	5	12.7
Hypospadias	67	12.0	—	—	47	14.6	2	1.6	5	17.7	13	33.0
Congenital hip dislocation	39	7.0	2	4.8	29	9.0	5	3.9	—	—	3	7.6
Down syndrome	32	5.7	4	9.6	22	6.8	4	3.1	2	7.1	—	—

* Rates per 10,000 live births by residents at birth. *Note*: one infant excluded with unknown county of residence

Table 2. Comparison of Ascertainment between Maryland BDRIS and Vital Records January 1, 1984–December 31, 1984

Sentinel Defect	Ascertainment: BDRIS* Number	BDRIS* Percent	Vital Records† Number	Vital Records† Percent	Both‡ Number	Both‡ Percent	Total
Total w/sentinel defects	171	45.4	82	21.8	124	32.9	377
Anencephaly	8	24.2	11	33.3	14	42.4	33
Spina bifida	12	32.4	9	24.3	16	43.2	37
Hydrocephalus w/o spina bifida	10	47.6	4	19.0	7	33.3	21
Cleft lip w/or w/o palate	14	35.9	11	28.2	14	35.9	39
Cleft palate	17	53.1	6	18.8	9	28.1	32
Esophageal atresia	4	44.4	1	11.1	4	44.4	9
Rectal/anal atresia	1	11.1	3	33.3	5	55.6	9
Reduction deformity							
Upper limb	9	37.5	—	—	15	62.5	24
Lower limb	15	48.4	—	—	16	51.6	31
Hypospadias	48	52.7	24	26.4	19	20.9	91
Congenital hip dislocation	29	63.0	7	15.2	10	21.7	46
Down syndrome	17	43.6	7	17.9	15	38.5	39

* Cases ascertained only through BDRIS and missed by Vital Records
† Cases ascertained only through Vital Records and missed by BDRIS
‡ Cases reported to both systems

Table 3. Comparison of Ascertainment between Maryland BDRIS and CDC Nationwide Monitoring Program, 1984

Sentinel Defect	Maryland Number	Maryland Rate*	CDC Number	CDC Rate*	Ratio Maryland:CDC
Anencephaly	22	3.9	172	2.7	1.40
Spina bifida	28	5.0	391	6.1	0.82
Hydrocephalus w/o spina bifida	17	3.0	346	5.3	0.57
Cleft lip w/or w/o palate	28	5.0	587	9.1	0.55
Cleft palate	26	4.6	359	5.5	0.84
Esophageal atresia	8	1.4	132	2.0	0.70
Rectal/anal atresia	6	1.1	233	3.6	0.31
Reduction deformity					
Upper limb	24	4.3	94	1.5	2.90
Lower limb	31	5.5	52	0.8	6.90
Hypospadias	67	12.0	2072	32.0	0.38
Congenital hip dislocation	39	7.0	2044	31.6	0.22
Down syndrome	32	5.7	502	7.8	0.73

* Rates per 10,000 live births

lower than rates reported by CDC for the same time period. For most defects, BDRIS rates are about 70 to 80 percent of CDC rates, which is consistent with the 20 to 30 percent underreporting shown in Table 2. Notable exceptions are the much higher rates of reduction/deformity (upper and lower limbs) in BDRIS as compared to CDC rates. This is due to the reporting of nonreduction limb deformities in Maryland, which makes the two rates not comparable.

Etiologic Classification of Defects Table 4, next page, summarizes data on known reported causes of sentinel defects. Etiologic groups were classified into: (1) known Mendelian or genetic syndromes, (2) intrauterine infections, and (3) chromosomal abnormalities. As shown in Table 4, of 295 infants with one or more sentinel defects, there were 12 cases of genetic syndromes, 1 intrauterine infection (CMV associated with congenital hydrocephalus), and 5 non-Down syndrome chromosomal abnormalities. However, the vast majority (245) of infants had no recognized disorder underlying the presence of these defects. Of these 245 cases, 186 (76 percent) had only one defect, while 59 (24 percent) had multiple defects.

Descriptive Epidemiology of Sentinel Defects Race (Table 5, next page): Overall, the reported incidence rates of sentinel defects are higher in whites than blacks (58.7 *v* 39.2 per 10,000). When rates of individual defects are examined, the white excess is seen for anencephaly, cleft lip with or without cleft palate, limb

Table 4. Etiologic Classification of Cases with Sentinel Defects Reported to the Maryland BDRIS January 1, 1984–December 31, 1984

Sentinel Defect	Syndromes		Intrauterine Infection		Chromosomal Anomalies		Single*		Multiple†		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total
Total w/sentinel defects	12	4.1	1	0.3	37	12.5	186	63.1	59	20.0	295
Anencephaly	1	4.5	—	—	—	—	11	50.0	10	45.5	22
Spina bifida	—	—	—	—	1	3.6	16	57.1	11	39.3	28
Hydrocephalus w/o spina bifida	—	—	1	5.9	1	5.9	5	29.4	10	58.8	17
Cleft lip w/or w/o palate	1	3.6	—	—	2	7.1	21	75.0	4	14.3	28
Cleft palate	2	7.7	—	—	1	3.8	17	65.4	6	23.1	26
Esophageal atresia	2	25.0	—	—	1	12.5	4	50.0	1	12.5	8
Rectal/anal atresia	2	33.3	—	—	—	—	2	33.3	2	33.3	6
Reduction deformity											
Upper limb	6	25.0	—	—	2	8.3	6	25.0	10	41.7	24
Lower limb	7	22.6	—	—	—	—	9	29.0	15	48.4	31
Other limb anomalies	1	5.6	—	—	1	5.6	8	44.4	8	44.4	18
Hypospadias	—	—	—	—	—	—	58	86.6	9	13.4	67
Congenital hip dislocation	2	5.1	—	—	1	2.6	29	74.4	7	17.9	39
Down syndrome	—	—	—	—	32	100.0	—	—	—	—	32

* Defect occurs alone
† Defect occurs with other anomalies

Table 5. Descriptive Epidemiology of Sentinel Defects Reported to the Maryland BDRIS, 1984 Rates* by Race†

Sentinel Defect	White (N = 38,310)		Black (N = 16,085)		Other (N = 1,561)		Total (N = 55,956)	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total with sentinel defects	225	58.7	63	39.2	4	25.6	295	52.7
Anencephaly	16	4.2	6	3.7	—	—	22	3.9
Spina bifida	19	5.0	9	5.6	—	—	28	5.0
Hydrocephalus w/o spina bifida	9	2.3	7	4.4	—	—	17	3.0
Cleft lip w/or w/o palate	25	6.5	3	1.9	—	—	28	5.0
Cleft palate	16	4.2	7	4.4	1	6.4	26	4.6
Esophageal atresia	6	1.6	2	1.2	—	—	8	1.4
Rectal/anal atresia	4	1.0	2	1.2	—	—	6	1.1
Reduction deformity								
Upper limb	23	6.0	1	0.6	—	—	24	4.3
Lower limb	26	6.8	5	3.1	—	—	31	5.5
Other limb anomalies	8	2.1	10	6.2	—	—	18	3.2
Hypospadias	47	12.3	19	11.8	—	—	67	12.0
Congenital hip dislocation	37	9.7	2	1.2	—	—	39	7.0
Down syndrome	29	7.6	—	—	3	19.2	32	5.7

* Rates per 10,000 live births
† Three infants with unknown race are excluded

reduction deformities, Down syndrome, and congenital hip dislocation.

Sex (Table 6): There is a female excess in the reported rates of anencephaly, esophageal atresia, and congenital hip dislocation and a male excess in the rates of reduction deformities of upper limbs.

Plurality (Table 7): Overall, twin births are at a higher risk of being affected with one or more sentinel defects (98.0 *v* 51.8 per 10,000). The twin excess is noted for almost all defect groups.

Maternal age (Table 8, next page): The well-known association between Down syndrome and advanced maternal age can be seen in BDRIS. For other defect groups, there is a tendency for upward trends in rates with advancing maternal age (for example, congenital hip dislocation, reduction deformities, and hypospadias). For most defects, however, the numbers of cases in each maternal age category are too small to achieve statistical significance.

Seasonality: Although some fluctuations in reported rates are seen by month of birth, the number of cases in each month was too small to detect statistically significant changes.

Birth weight/gestational age (Tables 9–10, page 844): Low birth weight infants (<2500 gm) and/or premature infants (<36 weeks) have higher rates of sentinel defects. There is also an increased rate of defects among postmature infants (>42 weeks).

Discussion

This report describes patterns of occurrence of 12 sentinel defects in the state of Maryland during 1984. Data were obtained via the newly established Maryland Birth Defects Reporting and Information System (BDRIS) and represent the first completed calendar year of birth defects reporting by Maryland hospitals. The main objectives of this analysis were to (1) describe preliminary data from a new system in the hope of increasing awareness of the Maryland BDRIS and birth defects monitoring in the state, (2) describe incidence rates of these defects in Maryland, and (3) attempt to evaluate the completeness of ascertainment of defects in the registry. The epidemiologic findings of race, sex,

Table 6. Descriptive Epidemiology of Sentinel Defects Reported to the Maryland BDRIS, 1984 Rates* by Sex†

Sentinel Defect	Male (N = 28,735) Number	Rate	Female (N = 27,221) Number	Rate	Total (N = 55,956) Number	Rate
Total with sentinel defects	167	58.1	125	45.9	295	52.7
Anencephaly	8	2.8	13	4.8	22	3.9
Spina bifida	14	4.9	14	5.1	28	5.0
Hydrocephalus w/o spina bifida	8	2.8	9	3.3	17	3.0
Cleft lip w/or w/o palate	16	5.6	12	4.4	28	5.0
Cleft palate	14	4.9	12	4.4	26	4.6
Esophageal atresia	2	0.7	6	2.2	8	1.4
Rectal/anal atresia	3	1.0	2	0.7	6	1.1
Reduction deformity						
Upper limb	15	5.2	8	2.9	24	4.3
Lower limb	16	5.6	14	5.1	31	5.5
Other limb anomalies	14	4.9	4	1.5	18	3.2
Hypospadias	67	23.3	—	—	67	12.0
Congenital hip dislocation	10	3.5	28	10.3	39	7.0
Down syndrome	14	4.9	18	6.6	32	5.7

* Rates per 10,000 live births
† Three infants with ambiguous sex are excluded

Table 7. Descriptive Epidemiology of Sentinel Defects Reported to the Maryland BDRIS, 1984 Rates* by Plurality

Sentinel Defect	Singleton (N = 54,833) Number	Rate	Multiple (N = 1,123) Number	Rate	Total (N = 55,956) Number	Rate
Total with sentinel defects	284	51.8	11	98.0	295	52.7
Anencephaly	20	3.6	2	17.8	22	3.9
Spina bifida	28	5.1	—	—	28	5.0
Hydrocephalus w/o spina bifida	17	3.1	—	—	17	3.0
Cleft lip w/or w/o palate	28	5.1	—	—	28	5.0
Cleft palate	25	4.6	1	8.9	26	4.6
Esophageal atresia	7	1.3	1	8.9	8	1.4
Rectal/anal atresia	5	0.9	1	8.9	6	1.1
Reduction deformity						
Upper limb	22	4.0	2	17.8	24	4.3
Lower limb	30	5.5	1	8.9	31	5.5
Other limb anomalies	17	3.1	1	8.9	18	3.2
Hypospadias	62	11.3	5	44.5	67	12.0
Congenital hip dislocation	39	7.1	—	—	39	7.0
Down syndrome	32	5.8	—	—	32	5.7

* Rates per 10,000 live births

and maternal age differences found here are consistent with what is reported in the literature. Examples of such known associations are: (1) the relationship of Down syndrome with advanced maternal age,[10] (2) the racial differences in the incidence of neural tube defects[11] and oral clefts,[12] (3) the association between twinning and the rate of birth defects,[13] and (4) the association of low birth weight and prematurity with birth defects.[14,15] Also, the analysis documents the marked underreporting of birth defects on vital records as shown in previous studies.[12,16–18]

This analysis has two main limitations. First, because of the rarity of sentinel defects, rates of individual defects may fluctuate on the basis of small numbers alone, especially when cases are classified by several demographic variables. It is clear that more data need to be collected before the system will be able to establish "baseline" rates of malformations. For example, the CDC nationwide monitoring system uses the first four years of data as baseline years.[2] The establishment of such baseline rates in Maryland will provide the system with the ability to detect clear geographic clustering of defects as well as to monitor temporal trends in reported rates within geographic areas.

Second, as with any new birth defects surveillance system that relies on reporting of cases, completeness of ascertainment of cases has to be a prime concern before making inferences from collected data. This is the main reason an analysis of vital records was undertaken. In subsequent years, completeness of reporting will be validated against hospital discharge diagnoses. Nevertheless, at this time, although reporting to BDRIS is better than reporting on vital records for most sentinel defects, we estimate that at least 20 to 30 percent underreporting still exists for some defect groups. It cannot be overemphasized that unless there is complete reporting, true regional or demographic differences in rates may be masked by differential completeness in ascertainment. The Maryland BDRIS will continue efforts to capture all sentinel defects via contacts with different institutions as well as by coordinating Maryland activities with the planned DC-area birth defects registry.

The potential usefulness of the Maryland BDRIS lies in several characteristics that distinguish the Maryland system from many other monitoring programs. The

Table 8. Descriptive Epidemiology of Sentinel Defects Reported to the Maryland BDRIS, 1984 Rates* by Maternal Age†

Sentinel Defect	Under 20 (N = 7,645)		20–24 (N = 16,312)		25–29 (N = 17,802)		30–34 (N = 10,712)		35–39 (N = 3,082)		40+ (N = 372)		Total (N = 55,956)	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total with sentinel defects	36	47.0	83	50.9	84	47.2	70	65.3	17	55.2	5	134.4	295	52.7
Anencephaly	7	9.2	5	3.1	5	2.8	3	2.8	2	6.5	—	—	22	3.9
Spina bifida	7	9.2	8	4.9	10	5.6	3	2.8	—	—	—	—	28	5.0
Hydrocephalus w/o spina bifida	5	6.5	6	3.7	4	2.2	2	1.9	—	—	—	—	17	3.0
Cleft lip w/or w/o palate	1	1.3	9	5.5	13	7.3	5	4.7	—	—	—	—	28	5.0
Cleft palate	6	7.8	6	3.7	7	3.9	7	6.5	—	—	—	—	26	4.6
Esophageal atresia	—	—	2	1.2	3	1.7	3	2.8	—	—	—	—	8	1.4
Rectal/anal atresia	—	—	—	—	5	2.8	1	0.9	—	—	—	—	6	1.1
Reduction deformity														
Upper limb	2	2.6	8	4.9	4	2.2	7	6.5	2	6.5	1	26.9	24	4.3
Lower limb	6	7.8	9	5.5	7	3.9	7	6.5	—	—	2	53.8	31	5.5
Other limb anomalies	1	1.3	8	4.9	3	1.7	4	3.7	1	3.2	1	26.9	18	3.2
Hypospadias	9	11.8	14	8.6	17	9.5	17	15.9	9	29.2	1	26.9	67	12.0
Congenital hip dislocation	3	3.9	15	9.2	6	3.4	13	12.1	—	—	2	53.8	39	7.0
Down syndrome	—	—	9	5.5	11	6.2	7	6.5	4	13.0	1	26.9	32	5.7

* Rates per 10,000 live births

† Maternal age was not reported for 31 Maryland births

Table 9. Descriptive Epidemiology of Sentinel Defects Reported to the Maryland BDRIS, 1984 Rates* by Birth Weight†

Sentinel Defect	≤2500 grams (N = 4,050) Number	Rate	>2500 grams (N = 51,881) Number	Rate	Total (N = 55,956) Number	Rate
Total with sentinel defects	71	175.3	224	43.2	295	52.7
Anencephaly	18	44.4	4	0.7	22	3.9
Spina bifida	6	14.8	22	4.2	28	5.0
Hydrocephalus w/o spina bifida	6	14.8	11	2.1	17	3.0
Cleft lip w/or w/o palate	9	22.2	19	3.7	28	5.0
Cleft palate	9	22.2	17	3.3	26	4.6
Esophageal atresia	4	9.9	4	0.8	8	1.4
Rectal/anal atresia	5	12.3	1	0.2	6	1.1
Reduction deformity						
Upper limb	6	14.8	18	3.5	24	4.3
Lower limb	10	24.7	21	4.0	31	5.5
Other limb anomalies	2	4.9	16	3.1	18	3.2
Hypospadias	14	34.6	53	10.2	67	12.0
Congenital hip dislocation	3	7.4	36	6.9	39	7.0
Down syndrome	2	4.9	30	5.8	32	5.7

* Rates per 10,000 live births
† Birth weight was not reported for 25 Maryland births

Maryland system is more complete than most other systems in reporting prenatal maternal illnesses, medication intake and prenatal occupational, environmental, and personal exposures. Such information can be used (when more data have been collected) to look for associations between specific defects and putative teratogens. It should be noted that although no control group of unaffected infants is available for comparison of exposures, the availability of multiple case groups is helpful in detecting associations with specific types of defects and overcomes the problem of recall bias that is inherent in case-control studies using unaffected controls.[19]

Maryland has implemented a Health Registry system that has, in addition to BDRIS, three other component registries:

- Toxic Substances Registry is a computerized system containing information about toxic substances and their presence throughout the state. The registry can be used to obtain a profile of a company with respect to its type of business, its inventory of hazardous chemical substances and the manner in which they are used, disposed of, and transported. It is also a repository of information involving toxic substances throughout the state.
- Occupational Disease Reporting System is a computerized system of occupationally related diseases.

Table 10. Descriptive Epidemiology of Sentinel Defects Reported to the Maryland BDRIS, 1984 Rates* by Gestational Age of Infant†

Sentinel Defect	≤36 weeks (N = 6,162) Number	Rate	37–41 weeks (N = 39,952) Number	Rate	≥42 weeks (N = 8,009) Number	Rate	Total (N = 55,956) Number	Rate
Total with sentinel defects	53	86.0	158	39.5	84	104.9	295	52.7
Anencephaly	13	21.1	4	1.0	5	6.2	22	3.9
Spina bifida	5	8.1	16	4.0	7	8.7	28	5.0
Hydrocephalus w/o spina bifida	6	9.7	7	1.8	4	5.0	17	3.0
Cleft lip w/or w/o palate	4	6.5	14	3.5	10	12.5	28	5.0
Cleft palate	6	9.7	12	3.0	8	10.0	26	4.6
Esophageal atresia	4	6.5	4	1.0	—	—	8	1.4
Rectal/anal atresia	3	4.9	—	—	3	3.7	6	1.1
Reduction deformity								
Upper limb	6	9.7	11	2.8	7	8.7	24	4.3
Lower limb	9	14.6	16	4.0	6	7.5	31	5.5
Other limb anomalies	2	3.2	13	3.3	3	3.7	18	3.2
Hypospadias	10	16.2	38	9.5	19	23.7	67	12.0
Congenital hip dislocation	1	1.6	22	5.5	16	20.0	39	7.0
Down syndrome	3	4.9	22	5.5	7	8.7	32	5.7

* Rates per 10,000 live births
† Gestational age was not reported for 1,833 Maryland births

• Cancer Registry collects information on incident cases and engages in active data collection.

These registries can be used in ecologic and case-control investigations of the relationship between specific malformations (or cancers) and chemicals in various geographic locations in the state.

Because of the recent increasing concern about the potential reproductive toxicity associated with toxic waste sites,[1] and because parts of Maryland have heavy industrial activity, Maryland has identified at least 40 sites as preliminary toxic waste sites and has made detailed evaluations of at least 13 of these sites. As the assessment of these sites continues, detailed information on the types and amounts of chemicals stored there should become available and can be used in correlative and case-control studies of the relationship between residence near waste sites and rates of specific defects ascertained via BDRIS.

Last, BDRIS has a service component. It provides families of affected infants with information about the nature of the malformation(s) in their children and about available medical and social health care systems. Sample packets including information on the defects themselves, sources of sub-specialized medical care, social services, financial assistance, and parent support groups are available from the Division of Hereditary Disorders, Maryland Department of Health and Mental Hygiene by calling 301-225-6730. These materials are intended as resources for both physicians and families. The Division of Hereditary Disorders also offers educational presentations to professional and lay groups about the BDRIS program upon request.

It is important to remember that birth defects are a leading cause of infant and child mortality and morbidity in this country.[20] Despite accumulating knowledge on the epidemiology, embryology, pathology and genetics of birth defects, causes of most malformations remain unknown.[21] The recent proliferation in birth defects monitoring systems in this country should provide new insights into the etiology of birth defects and, ultimately, their prevention. These goals can be achieved not only by monitoring the incidence rates of defects in relationship to new environmental exposures but also by using population-based data in case-control studies of long-standing teratogens that thus far have escaped identification.

Most defects are individually rare. With better reporting of defects and further accumulation of cases, Maryland BDRIS will be able to play an increasingly important role in etiologic studies of birth defects.

References

1. Holtzman, N.A. and Khoury, M.J. "Monitoring for Congenital Malformations." *Ann Rev Public Health* 7(1986):237–66.

2. Edmonds, L.D.; Layde, P.M.; James, L.M.; Flynt, J.W.; Erickson, J.D.; Oakley, G.P. "Congenital Malformations Surveillance: Two American Systems." *Int J Epidemiol* 10(1981):247–52.

3. Oakley, G.P. "Population and Case-control Surveillance in the Search for Environmental Causes of Birth Defects." *Public Health Rep* 99(1984):465–68.

4. Erickson, J.D.; Mulinare, J.; McClain, P.W. *et al. Vietnam Veterans Risk for Fathering Babies with Birth Defects.* US Department of Health and Human Services, Public Health Service, Centers for Disease Control, Atlanta, 1984.

5. Khoury, M.J.; Erickson, J.D.; James, L.M. "Etiologic Heterogeneity of Neural Tube Defects: II. Clues from Family Studies." *Am J Hum Genet* 34(1982):980–87.

6. Flynt, J.W. and Hay, S. "International Clearinghouse for Birth Defects Monitoring." *Contributions to Epidemiology and Biostatistics 1979*, Vol. 1. Klingberg, M.A. and Westerall, J.A.C., eds. Basel: Karger, 1979, pp 44–52.

7. International Clearinghouse for Birth Defects Monitoring Systems. *1981 Annual Report.* Stockholm: Garnison-stryckeriet, 1983.

8. Lechat, M.F.; Dewals, P.; Weatherall, J.A.C. "European Economic Community's Concerted Action on Congenital Anomalies." *Prog Clin Biol Res* 163B(1985):11–16.

9. Edmonds, L.D. Atlanta (personal communication on unpublished data from the Birth Defects Monitoring Program).

10. Adams, M.M.; Erickson, J.D.; Layde, P.M.; Oakley, G.P. "Down's Syndrome—Recent Trends in the United States." *JAMA* 246(1981):758–60.

11. Elwood, J.M. and Elwood, J.H. *Epidemiology of Anencephalus and Spina Bifida.* New York, Toronto: Oxford University Press, 1980, pp 175–78.

12. Khoury, M.J.; Erickson, J.D.; James, L.M. "Maternal Factors in Cleft Lip and Palate: Clues from Interracial Crosses in the United States." *Teratology* 27(1983):351–57.

13. Layde, P.M.; Erickson, J.D.; Falek, A.; McCarthy, B.J. "Congenital Malformations in Twins." *Am J Hum Genet* 32(1980):69–78.

14. Gravett, M.G. "Causes of Preterm Delivery." *Semin Perinatol* 8(1984):246–57.

15. Spiers, P.S. "Does Growth Retardation Predispose the Fetus to Congenital Malformations." *Lancet* 1(1982):312–14.

16. Polednak, A.P. and Janerich, D.T. "Use of Available Record Systems in Epidemiologic Studies of Reproductive Toxicology." *Am J Ind Med* 4(1983):329–48.

17. Knox, E.G.; Armstrong, E.H.; Lancashire, R. "The Quality of Notification of Congenital Malformations." *J Epidemiol Community Health* 38(1984):296–305.

18. Huether, C.A.; Gummere, G.R.; Hook, E.B. *et al.* "Down's Syndrome: Percentage Reporting on Birth Certificates and Single Year Maternal Age Risk Rates for Ohio 1970–79; Comparison with Upstate New York." *Am J Publ Health* 71(1981):1357–62.

19. Bracken, M.B. "Methodologic Issues in Epidemiologic Investigations of Drug-induced Malformations." In Bracken, M.B. (ed). *Perinatal Epidemiology.* Oxford University Press, 1984, pp 423–49.

20. Porter, I.H. "Control of Hereditary Disorders." *Ann Rev Publ Health* 3(1982):277–319.

21. Kalter, H. and Warkany, J. "Congenital Malformations: Etiologic Factors and Their Role in Prevention." *N Engl J Med* 308(1983):424–31, 491–97.

Foley Catheter and Cervical Cerclage

SHAILAJA M. DIDOLKAR MD

Rupture of the membranes during cervical cerclage may occur if the cervix is dilated and the membranes are bulging. Using a No. 16 F balloon Foley catheter may prevent this complication by gently reducing the membranes. Moreover, its removal results in a desirable cervical opening and insures against prolapse.

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Accidental perforation of the membranes is one of the risks associated with cervical cerclage. When the cervix is dilated (Figures 1 and 2), it becomes more difficult to perform cervical cerclage, and the possibility of membrane perforation increases. In patients with a history of an incompetent but undilated cervix, fetal survival is 92 percent after cervical cerclage. This is reduced to 40 percent when the cervix is dilated and further reduces to 23 percent if technical difficulties, such as rupture of the membranes, arise during cervical cerclage.[1] Holman recommended the use of the Foley catheter during cervical cerclage in 1973.[2] However, this approach is still uncommon, and many institutions have not heard of it.

Material, Method, and Technique

Patients selected for this procedure should not have uterine contractions, severe cervicovaginal infection, or rupture of the membranes.

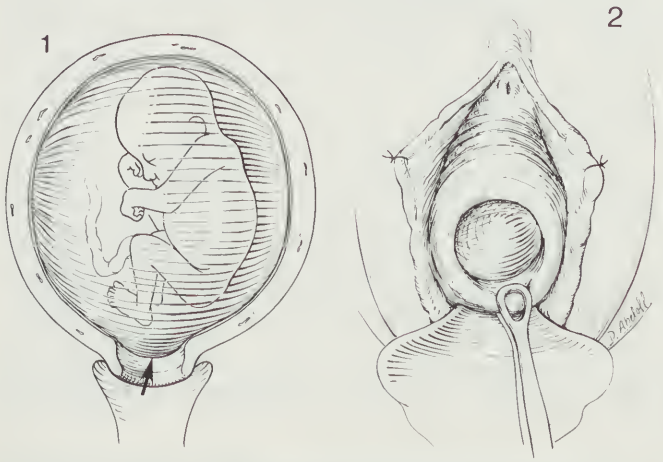
The patient is placed in the Trendelenburg position and given routine vaginal and perineal prep and draping. The safety of the urinary bladder is ensured by emptying the bladder with a metal catheter, a procedure that also identifies the lowest level of the bladder on the cervix. The cervix is held with a sponge stick, and a No. 16 F silastic Foley catheter with a 30 cc balloon is introduced into the cervix (Figures 3 and 4).

As the balloon is inflated, the membranes are gently pushed back within the intrauterine cavity. The level of the internal os is determined by identifying the junction of the rugose surface of the vaginal wall and the smooth surface of the ectocervix. The cervical purse-string suture using Ethobond No. 5 is placed through the cervicovaginal epithelium and musculature as high as possible at this level (Figures 5 and 6).

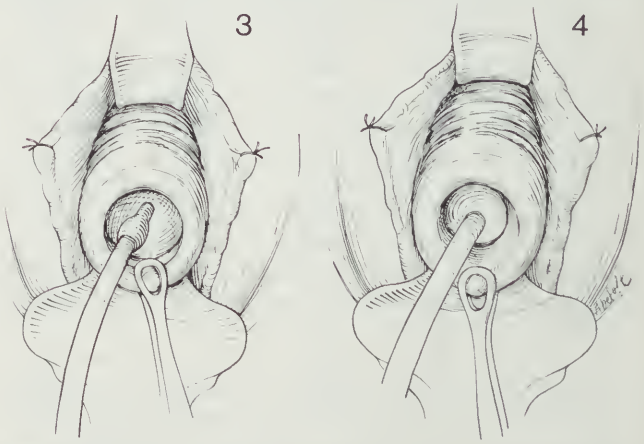
The diameter of the inflated Foley balloon is 4 cm, and its circumference is approximately 11 cm; this allows suturing without danger of rupturing the membranes. A second suture, if desired, may be placed proximal to the first. Both are positioned according to McDonald's original description.[3] Once the sutures are in place, they are tightened and tied with the catheter in place (Figures 7 and 8). The catheter balloon is deflated and catheter is removed, leaving a desirable opening in the cervix. This method of removal also ensures no prolapse of membranes.

This technique was used in 11 patients by the author from 1979 to 1985. Indications for this procedure were cervical incompetence, suggested by classic midtrimester pregnancy losses, and cervical dilatation in first and second trimesters without contractions of the uterus.

Complications of this procedure could occur immediately at surgery or within the first week of the procedure. They also could occur late after the first week of the procedure or at the time of delivery. Immediate



Figures 1 and 2. A midtrimester pregnancy with cervical dilation of 3 cm, effacement, and bulging membranes are shown.



Figures 3 and 4. A Foley catheter with a 30 cc inflated balloon (11 cm circumference, 4 cm diameter) is introduced to easily push the membranes above the internal os.

complications are rupture of membranes, infection, premature labor, and/or miscarriage. Late complications at the time of delivery are infection and cervical tears.

There were no immediate complications in our eleven patients. All except one baby survived. One patient had premature rupture of membrane and chorioamnionitis at 20 weeks. Her cerclage was done at 14 weeks. Two mothers had premature labor at 32 and 36 weeks respectively. One mother had partial cervical avulsion after full-term, spontaneous vaginal delivery.

Discussion

Rupture of the membranes resulting in premature delivery is the most frequent complication of cervical cerclage. In reemphasizing the use of the Foley catheter during this procedure, I have suggested some modifications in technique.

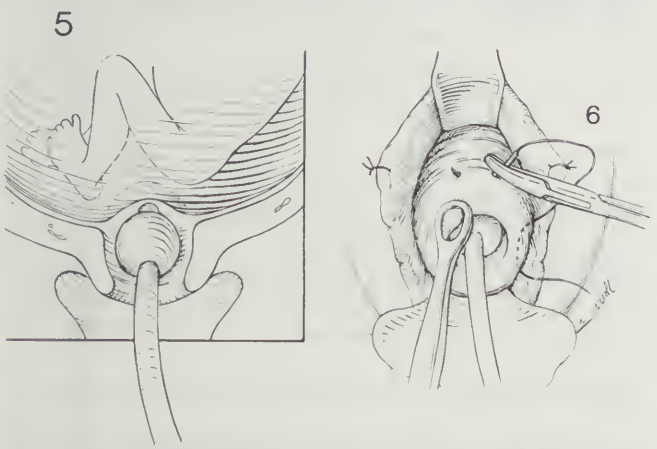
In our experience, the approach suggested by Holman with the Foley catheter has been the safest and most effective method. In our series, the use of the large Foley catheter with a 30 cc balloon (instead of a 5 cc balloon, as suggested by Holman) has the added advantage of further safety—especially when used for cervical dilation of 3 cm or more. Furthermore, we did not see the need for cutting the tip of the Foley catheter as Holman recommends.

References

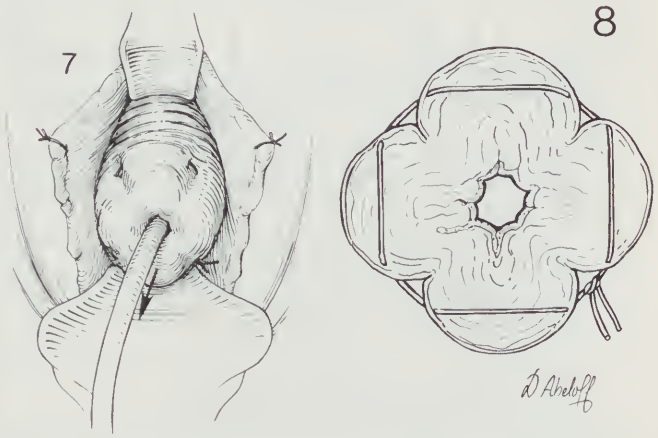
1. Peters, III, W.A.; Thiagarajah, S.; and Harbert, Jr., G.M. "Cervical Cerclage—Twenty Years' Experience." *South Med J* 72(1979):933.

2. Holman, M.R. "An Aid for Cervical Cerclage." *Obstet Gynecol* 42(1973):478.

3. McDonald, I.A. "Suture of the Cervix for Inevitable Miscarriage." *Br J Obstet Gyneacol* 64(1957):346.



Figures 5 and 6. The internal os is determined by defining the junction of the rugose vaginal wall with the smooth surface of the ectocervix, and sutures are placed at this level.



Figures 7 and 8. Sutures are tied with the Foley catheter in place. As the deflated Foley catheter is removed, a desirable cervical opening remains.

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Team Management of Patients with Diffuse Upper Extremity Complaints

A. LEE DELLON MD, H. HENDLER MD, J.E.T. HOPKINS MD, A.C. KARAS MD, and J.N. CAMPBELL MD

Patients with diffuse pain disorders of the neck, shoulder, and upper extremity (especially those who may be involved in litigation or who are treatment failures) are best served by a multidisciplinary diagnostic approach. The team should consist of a thoracic surgeon, a hand surgeon, a psychiatrist, and a neurosurgeon. Management must include psychological as well as physical diagnosis and treatment.

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Patients complaining of diffuse numbness, pain and weakness of the upper extremities, head, neck, and shoulder are a challenge to physicians to diagnose and treat. The symptoms are often bilateral. Patients frequently present following an accident involving hyperextension-hyperflexion injuries, and their cases often are associated with Workmen's Compensation or personal liability. Symptoms may be associated with some form of arthritis. Because a specific, treatable disorder frequently is not diagnosed, these patients live with discomfort, uncertainty, and disability, becoming chronic-pain patients and carrying the reputation of "malingerers."

We describe a team approach to managing this "problem patient." The team consists of members capable of providing psychiatric intervention, drug management, musculoskeletal strengthening and relaxation, rheumatologic consultation, and appropriate surgical intervention if indicated.

Patient Entrance to Team Management

Most often, the injured patient has received acute or emergency medical care with appropriate treatment of lacerations and fractures and has been sent for rehabilitation, such as physical therapy. If some new or original symptoms or some complication from therapy prevent return to work, the frustrated patient is referred to other physicians.

Another entrance pathway is through referral from internists (usually rheumatologists or neurologists) who recognize the presence of a surgically treatable problem. Thus, the patient has had appropriate emergency care, evaluation, and treatment of underlying medical problems, and usually a six-month course of physical therapy and rehabilitation.

A third group of patients consists of those who have had cervical disc surgery or thoracic outlet surgery, and who have either persistent or recurrent symptoms. These patients are referred directly by their surgeon or indirectly by the psychiatrist managing their chronic pain.

Presenting Symptoms

The patient's complaints are most often numbness and tingling in the hand, usually the little and ring fingers, but all fingers may be involved with pain that "shoots" up the arm into the shoulder. The whole hand may be involved during the day and frequently awakens the patient from sleep at night, or if he/she is a heavy sleeper, the hand may feel "dead" and heavy in the morning. The upper arm, shoulder, and neck ache, especially if the extremity is used for activities requiring the hand to be lifted to the shoulder level or above, for example, putting dishes on a shelf or combing one's hair.

There is often a sensation of tightness in the neck and shoulder that may extend to the chest. Pain may extend to the side of the face and neck. The hand is perceived as weak and clumsy or can't be controlled as well as before: a symptom difficult for the patient to describe. Objects are frequently dropped, and writing is difficult. Occipital and temporal headache may be frequent. Symptoms are often bilateral and do not usually involve the back or legs unless these areas were injured initially. There may be discrete areas of pain or tenderness in the neck and shoulder region.[1-4]

Diagnostic Techniques

Signs and symptoms found useful in the differential diagnoses are listed in Table 1, next page. The physician should not be "put off" by the patient's manner, which usually is conditioned by previous "physician failure," economic and social concerns, and living with chronic pain. These patients frequently are depressed and angry with their previous doctors.[5]

The physical exam is the most valuable segment of the diagnostic approach to patients with peripheral nerve entrapment. Those tests of particular value are listed in Table 2, next page. The most critical information for peripheral nerve entrapment is given by tingling or pain in the distribution of the peripheral nerve when it is percussed (a positive Tinel's sign) and by provocative tests that increase pressure at local sites along the peripheral nerve, for example, wrist flexion (Phalen's sign) for median nerve at the wrist, elbow flexion for ulnar nerve at the elbow, and hyperpronation for radial-sensory nerve in the forearm.[6]

Table 1. Critical Historical Points

Suggestive of median nerve compression at wrist
- Nocturnal occurrence of symptoms

Suggestive of ulnar nerve compression at elbow
- Dropping things, loss of control of fingers, cramping in fingers, worsening of symptoms when elbow is flexed (talking on phone, working at desk)

Suggestive of thoracic outlet
- Symptoms predominantly in shoulder, upper arm, side of neck, and anterior chest
- Possibly associated with headache
- Symptoms brought on or worsened by working with arms elevated

Suggestive of cervical disc disease
- Pain with coughing or sneezing
- Pain with neck movements
- Relief of pain with two-poster brace or cervical collar

Suggestive of vascular compression
- Venous: hand swells, veins stay distended
- Arterial: coldness in hands, color becomes pale when hands are elevated

Table 2. Critical Physical Diagnosis Points

Suggestive of location of peripheral nerve compression
- Tenderness on palpation or percussion of nerve with radiation into distribution of nerve
  median beneath transverse carpal ligament, ulnar at postcondylar groove, brachial plexus beneath scalene muscle, radial-sensory at brachioradialis insertion
- Elicitation of symptoms by provocative tests
  Phalen's test (wrist flexion for median at wrist), elbow flexion for ulnar nerve at elbow, Roos'[1] sign (arm elevation for brachial plexus at thoracic outlet), hyperpronation sign for radial-sensory nerve

Suggestive of axonal dysfunction without intraneural fibrosis
- Abnormal vibratory perception, muscle weakness

Suggestive of intraneural fibrosis with axonal degeneration
- Abnormal two-point discrimination (>6 mm static, >3 mm moving),[14] muscle atrophy

Response to trigger point injections
- Anterior and medial scalene muscles in brachial plexus compression

Response to diagnostic nerve blocks
- Greater occipital nerve for occipital neuralgia

Electrodiagnostic studies frequently have been obtained prior to the patient's referral. In complex problems such as these, it is valuable to obtain these tests to rule out an underlying systemic type of polyneuropathy (such as diabetic or alcoholic) and to identify any site of localized nerve entrapment or cervical radiculopathy. In many of these patients, the electrodiagnostic studies will be normal but this does **not** mean absence of physical problems.[7] Normal electrodiagnostic studies must be interpreted cautiously in these patients. This testing remains controversial because some authors have not found it useful in identifying thoracic outlet compression.[8–10]

Additional tests to rule out specific problems are thermography,[11] pulse volume recordings for vasospastic disorders, and three-phase flow (Technetium 99) studies for reflex sympathetic dystrophy.[11,12]

Invasive techniques, such as trigger-point injections and diagnostic nerve blocks, are essential in the evaluation of myofascial pain and pain of neuromatous origin.[3,13]

Discussion

The key to differentiating among etiologies of patients' problems is a careful history and a thorough physical examination. Cervical disc disease with foraminal neural compression or brachial plexus compression will not cause local tenderness of a peripheral nerve at the wrist or elbow. Compression of the median nerve at the wrist or the ulnar nerve at the elbow will not cause pain in the neck when the head is turned, tenderness beneath the anterior scalene muscles during palpation, nor a positive response to the provocative test described by Roos for brachial plexus compression at the thoracic outlet (see Table 2).

Interpretation of the history and physical examination, supplemented by the indicated additional test results (that is, x-ray of chest and cervical spine, CAT scan of neck, myelogram, electrodiagnostics, and so on) is often made difficult by the socioeconomic setting (Workmen's Compensation, accident litigation), chronic pain (perhaps drug dependence), and the possible coexistence of multiple sites of nerve compression. This latter circumstance, termed "the double crush syndrome," is exemplified by the association of cervical disc disease and carpal tunnel syndrome, or thoracic outlet syndrome and cubital tunnel syndrome.[15,16] It implies that serial constraints on axoplasmic flow (neither of which may be sufficient in and of itself to produce symptoms) may produce clinical symptoms when more than one is present. An experimental basis for this hypothesis has been demonstrated recently.[17] Our experience has been that such patients usually have either cervical disc problems or brachial plexus

compression, plus one or more entrapped peripheral nerves. More than half the patients have bilateral symptoms.

Critical in the appraisal of patients' symptoms has been the awareness that normal electrodiagnostic studies do not mean "there is nothing wrong." For example, in testing median nerve compression at the wrist (electrodiagnostic techniques are the most sophisticated for this area), there may be 20 percent "false negatives" in advanced carpal tunnel syndrome.[7] Recent experimental models of chronic nerve compression in the rat[18] and primate[19] provide a basis for this clinical finding. Fascicles within a major peripheral nerve are not equally affected by nerve compression: there may be some relatively normal-appearing fascicles in terms of fiber counts and myelination that would account for the normal electrodiagnostic findings. Other fascicles may show significant demyelination, accounting for the clinical symptoms.

Also critical in appraisal of patients is being able to distinguish the malingerer. Use of the modified Hendler test for chronic back pain is acceptable for upper extremity pain with malingerers having high scores, and patients with an organic basis for their pain having low scores.[20] Individual and group therapy sessions,[21] management of pain with nonnarcotic drugs, and pharmacologic treatment of the mood disorders associated with chronic pain[21] are often necessary adjuncts during the nonoperative, as well as the postoperative period. Where diagnosis is based on the tests described above, patients demonstrate an appropriate improvement in one segment of their spectrum of complaints.[22] Although the total treatment takes a long time, we believe this approach can yield satisfying results for a small segment of the patient population.

Operative management of patients begins after at least a six-month trial of nonoperative management directed toward physical modalities that may relieve chronic muscle spasms, myofascial syndrome, and splinting. Surgery to decompress entrapped peripheral nerves is individualized as to which site is treated first and which technique used. The controversy as to where to direct surgery is best exemplified by the so-called "thoracic outlet syndrome."[1,4] By using the term **outlet**, attention has been directed to the area where the brachial plexus is compressed between the clavicle and the first rib or a cervical rib, if one is present. The association of intrinsic muscle wasting with cervical rib was described so well[23–26] that it made acceptance of carpal tunnel syndrome as a source of thenar atrophy difficult during the first half of this century. Some physicians question the existence of the thoracic outlet syndrome and attribute all symptoms to the carpal tunnel syndrome.[27] Surgery for thoracic outlet has been directed to first rib removal, by either transaxillary,[1,4] supraclavicular,[28] or posterior thoracotomy approach.[29] Due to failures or recurrences, an "upper thoracic outlet syndrome" has been described for which anterior scalenectomy is suggested.[30]

Conceptually, the brachial plexus may be entrapped from transverse spinal processes to the axilla. Perhaps the ideal approach would be directed at relieving compression along the entire course of the plexus. In support of this suggestion, it is noted that some have obtained good results in these cases of thoracic outlet syndrome without resecting the first rib.[31,32]

References

1. Roos, D.B. and Owens, J.C. "Thoracic Outlet Syndrome." *Arch Surg* 93(1966):71–74.
2. Knox, D.L. and Mustonew, E. "Greater Occipital Neuralgia." *Trans Pa Acad Ophthalmol Otolaryngol* 74(1975):513.
3. Cox, C.L. and Cocks, G.R. "Occipital Neuralgia." *J Med Assn Ala* 86(1979):23–32.
4. Urschel, H.C. and Razzuk, M.A. "Management of the Thoracic Outlet Syndrome." *N Engl J Med* 286(1972):1140–43.
5. Hendler, N. "Depression Caused by Chronic Pain." *J Clin Psychiatry* 45(1984):30–36.
6. Dellon, A.L. and Mackinnon, S.E. "Radial Sensory Nerve Entrapment." *J Hand Surg* 11A(1986):206–10.
7. Spindler, H. and Dellon, A.L. "Nerve Conduction Studies and Sensibility Testing in Carpal Tunnel Syndrome." *J Hand Surg* 7(1982):260–63.
8. Daube, J.R. "Nerve Conduction Studies in the Thoracic Outlet Syndrome." *Neurology (NY)* 25(1975):347 abstr.
9. Cherington, M. "Ulnar Conduction Velocity in Thoracic-outlet Syndrome." *N Engl J Med* 294(1976):1185.
10. Wilbourn, A.J. and Lederman, R.J. "Evidence for Conduction Delay in Thoracic-outlet Syndrome Is Challenged." *N Engl J Med* 310(1984):1052–53.
11. Hendler, N.; Uematesu, S.; Long, D. "Thermographic Validation of Physical Complaints in 'Psychogenic Pain' Patients." *J Acad Psychosom Med* 23(1982):4–9.
12. Mackinnon, S.E. and Holder, L.E. "Use of Three-phase Radionucleide Bone Scanning in the Diagnosis of Reflex Sympathetic Dystrophy." *J Hand Surg* 9A(1984):556–63.
13. Hendler, N.; Fink, H.; Long, D. "Myofascial Syndrome: Response to Trigger-point Injections." *J Acad Psychosom Med* 24(11):(1983):990–99.
14. Dellon, A.L. "The Moving Two-point Discrimination Test; Clinical Evaluation of the Quickly-adapting Fiber Receptor System." *J Hand Surg* 3(1978):474–81.
15. Upton, A.R.M. and McComas, A.J. "The Double Crush Syndrome in Nerve Entrapment Syndromes." *Lancet* 2(1973):359–62.
16. Hurst, L.C.; Weissberg, D.; Carroll, R.E. "The Relationship of the Double Crush to Carpal Tunnel Syndrome (An Analysis of 1,000 Cases of Carpal Tunnel Syndrome)." *J Hand Surg* 10-B(1985):202–204.
17. Seiler, W.A.; Schlegel, R.; Mackinnon, S.E.; Dellon, A.L. "The Double-crush Syndrome: Development of a Model." *Surg Forum* 34(1983):596–98.
18. Mackinnon, S.E.; Dellon, A.L.; Hudson, A.R.; Hunter, D. "Chronic Nerve Compression-An Experimental Model in the Rat." *Ann Plast Surg* 13(1984):112–20.
19. Mackinnon, S.E.; Dellon, A.L.; Hudson, A.R.; Hunter, D.A. "A Primate Model for Chronic Nerve Compression." *J Reconstr Micro-*

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surg 1(1985):185–95.

20. Hendler, N.; Viernstein, M.; Gucer, P.; Long, D. "A Preoperative Screening Test for Chronic Back Pain Patients." *J Acad Psychosom Med* 20(1979):801–808.

21. Hendler, N.; Viernstein, M.; Shallenberger, C.; Long, D. "Group Therapy with Chronic Pain Patients." *J Acad Psychosom Med* 22(1981):336–40.

22. Hendler, N. "The Anatomy and Psychopharmacology of Chronic Pain." *J Clin Psychiatry* 43(1982):15–20.

23. Howell, C.M.H. "A Consideration of Some Symptoms which May Be Produced by Seventh Cervical Ribs." *Lancet* (1907):1702–1707.

24. Wilson, S.A.K. "Some Points in the Symptomatology of Cervical Rib, with Especial Reference to Muscular Wasting." *Proc R Soc Lond* 6(1913):133–41.

25. Adson, A.W. and Coffey, J.R. "Cervical Rib: A Method of Anterior Approach for Relief of Symptoms by Division of Scalenus Anticus." *Ann Surg* 85(1927):839.

26. Adson, A.W. "Cervical Ribs: Symptoms, Differential Diagnosis for Section of the Scalenus Anticus Muscle." *J Int Col Surg* 16(1951):546.

27. Carroll, R.E. and Hurst, L.C. "The Relationship of Thoracic Outlet Syndrome and Carpal Tunnel Syndrome." *Clin Orthop* 164(1982):149–53.

28. Hempel, G.K.; Rusher, A.H.; Wheeler, C.G.; Hunt, D.G.; Bukhari, H.L. "Supraclavicular Resection of the First Rib for Thoracic Outlet Syndrome." *Am J Surg* 141(1981):213–15.

29. Urschel, H.C., Jr.; Razzuk, M.A.; Albers, J.E., *et al.* "Reoperation for Recurrent Thoracic Outlet Syndrome." *Ann Thorac Surg* 21(1976):1–9.

30. Roos, D.B. "The Place for Scalenectomy and First-rib Resection in Thoracic Outlet Syndrome." *Surg* 92(1982):1077–85.

31. Stallworth, J.M.; Quinn, G.J.; Aiken, A.F. "Is Rib Resection Necessary for Relief of Thoracic Outlet Syndrome?" *Ann Surg* 185(1979):581–89.

32. Stallworth, J.M. and Horne, J.B. "Diagnosis and Management of Thoracic Outlet Syndrome." *Arch Surg* 119(1984):1149–51.

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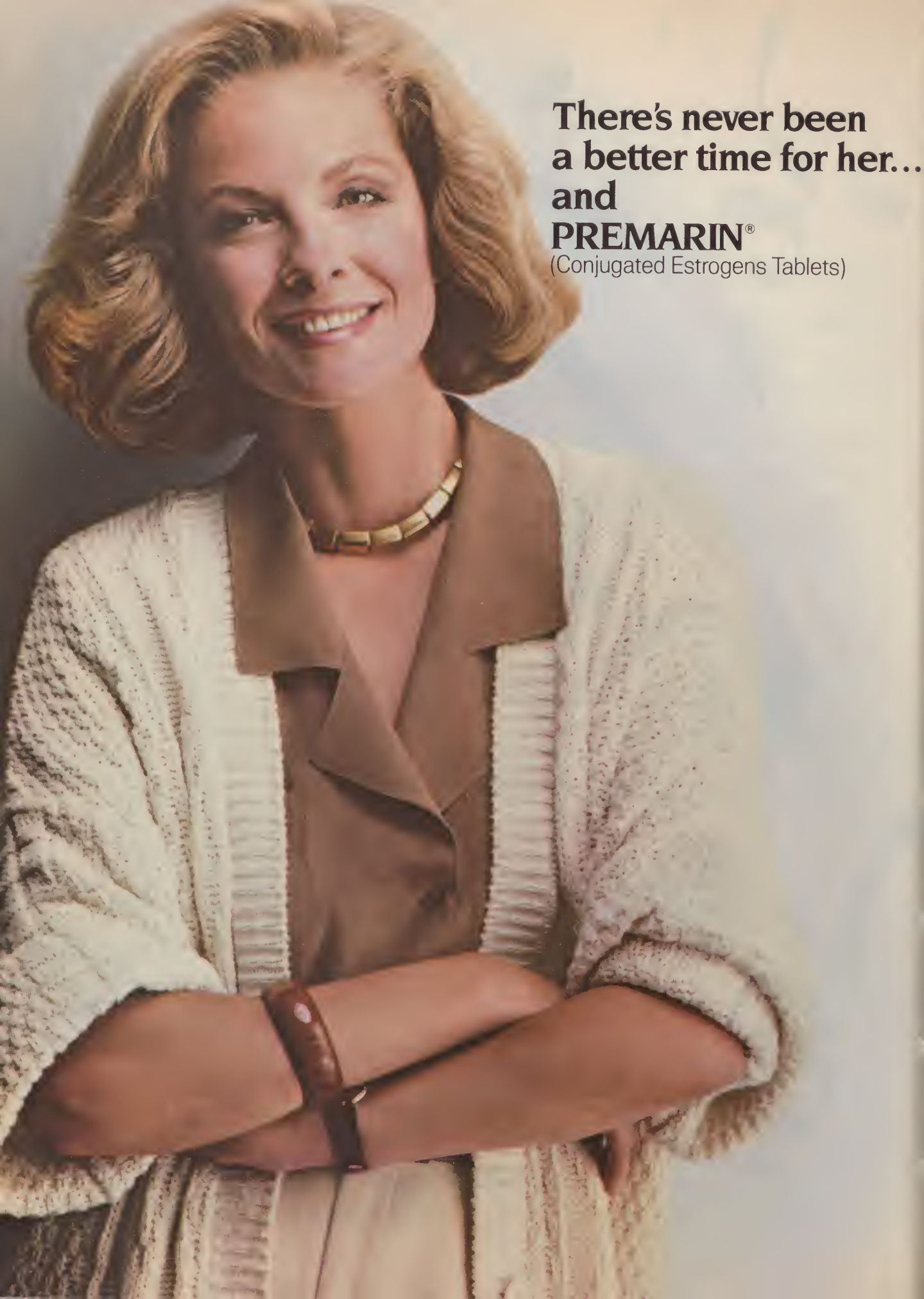
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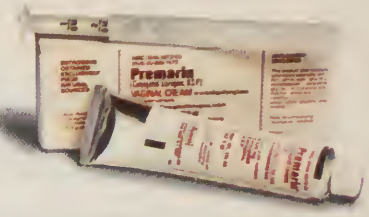
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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g. Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605 **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985; 67: 496-499. **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:1;41-52. **5.** Barnes RB, Roy S, Lobo RA: Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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Group D Nonenterococcal Endocarditis Associated with Benign Large Bowel Obstruction

ROBERT J. NEUFELD MD, VICTOR R. HREHOROVICH MD, DOROTHEA STERN MD, and GEORGE G. DEL RIO MD

While the association of Group D nonenterococcal streptococcal (GDNES) endocarditis with carcinoma of the bowel and other benign colonic lesions has been well documented, this case represents a previously unreported association of GDNES endocarditis with simple colonic obstruction caused by fecal impaction. This patient's illness suggests that GDNES endocarditis can stem from relatively benign processes. Nonetheless, because of frequent association of this form of endocarditis with colonic malignancies, a thorough evaluation of the bowel is indicated.

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The association of bacterial endocarditis with carcinoma of the colon was first reported in 1951 by McCoy and Mason.[1] Three cases were reported by Roses *et al.* in 1974.[2] In the same year Keusch[3] reiterated the significance of this association. The specific association of *Streptococcus bovis* with carcinoma of the colon was documented by Klein *et al.* in 1977.[4] Various subsequent reports have confirmed the association as well as the relationship between benign colonic lesions and bacterial endocarditis. The present case is a previously undocumented association of Group D nonenterococcal streptococcal (GDNES) endocarditis with fecal impaction. We presume the impaction facilitated the entry of the organism into the bloodstream with resultant valvular infection.

Case Report

The patient, a 74-year-old Caucasian woman, presented with the chief symptoms of vomiting of three-days' duration. She had developed sudden onset of low back pain prior to admission and was experiencing progressive abdominal distention. A low-grade fever developed two days prior to admission.

Her medical history included a right-sided CVA with a left hemiparesis and residual seizures treated with Dilantin. During hospitalization for endocarditis, she had an episode of subacute bacterial endocarditis treated successfully with penicillin and streptomycin. Her family history included a father with renal carcinoma and a mother with gastric carcinoma.

Physical examination revealed a well-developed, well-nourished elderly woman in no apparent distress. Blood pressure was 140/78, pulse 80 per minute, respirations 18 per minute, and temperature 101°F. She was edentulous. Bilateral II/VI carotid bruits and a Grade III/VI holosystolic murmur at the apex radiating to the lower sternal border and the axilla were present. The point of maximum cardiac impulse was in the sixth intercostal space. There was no dorsalis pedis pulse on the left. Neurologically, she was alert and oriented with decreased sensation to vibration and position on the left side and 3/5 motor strength in the left upper and lower extremities. No Roth spots, Janeway lesions, Osler's nodes, or splinter hemorrhages were noted.

Her urinalysis showed 8–12 WBCs, 3–4 RBCs, and a small number of bacteria. The WBC was 12,700 with a slight left shift. The hematocrit was 44 and the platelet count was 478,000. The glucose was 235 mg%, BUN 33 mg%, sodium 140 mEq/L, potassium 4.9 mEq/L, chloride 99 mEq/L, and bicarbonate 30 mEq/L.

The EKG revealed atrial fibrillation that had been noted on previous EKGs. Chest X-ray showed cardiomegaly and atherosclerotic changes in the aorta. Abdominal flat and upright films revealed moderate distention of the small bowel and colonic loops secondary to a low-lying colonic obstruction suggestive of a fecal impaction.

Proctosigmoidoscopy revealed a fecal impaction at 10 cm. It was evacuated. On the second hospital day the patient's temperature rose to 101.4°F rectally with accompanying hypotension and bradycardia. Nine sets of blood cultures were taken during the hospital course, and GDNES was eventually identified in all. It was highly sensitive to penicillin. On the fourth hospital day, the patient developed proteinuria and bilirubinuria. She continued to have a low-grade fever and penicillin, one million units IV every 4 hours, was started on the fifth hospital day, and continued for 12 days. On the 17th hospital day her temperature rose to 102.8°F, and the penicillin was increased to three million units every 4 hours. Within 5 days the patient defervesced and remained afebrile through the remainder of the 41-day hospital stay.

Echocardiography revealed mitral annular calcification. The anterior leaflet showed flail motion with prolapse into the left atrium. There was a high probability of a vegetation on the anterior leaflet. Left ventricular function was preserved and the left atrium was at the upper limits of normal dimensions. Echocardiography prior to discharge showed abnormal echoes in the left atrium compatible with a thrombus or flail mitral valve cusp. Thickening of the aortic valve also was reported.

Barium enema on the sixth hospital day showed an

Table 1. Studies Reviewed: Colonic Lesions Associated with Group D Nonenterococcal Endocarditis

Author	Year	Number of Cases
Silver[10]	1984	2
Bayliss[11]	1984	6
Robbins[12]	1983	1
Hossenbux[13]	1983	1
Jolobe[14]	1983	1
Kewal[15]	1983	1
Belinkie[16]	1983	2
Cobb[17]	1982	1
Shoenbaum[18]	1982	1
Saltzman[19]	1981	1
Seaman[20]	1981	1
Marshall[21]	1981	1
Warren[22]	1981	1
Manzella[23]	1981	3
Ribaudo[24]	1981	1
Dunham[25]	1980	2
Noble[26]	1978	1
Smith[27]	1978	1
Crowley[28]	1978	1
Levy[29]	1978	2
Steinberg[30]	1977	1
Total		32

Table 2. Age and Sex Distribution of GDNES Endocarditis Associated with Benign Large Bowel Obstruction

Age	Male	Female
Less than 40	0	0
41–50	1	2
51–60	5	1
61–65	5	2
66–70	4	3
71–75	2	2
76–80	3	2
Older than 80	0	1
Total	20	14

elongated radiolucent filling defect in the lower descending colon that remotely resembled a polypoid lesion and one middle sigmoid diverticulum. Colonoscopy, done just prior to discharge was completely normal. The patient was reported to be doing well with no recurrence of endocarditis or gastrointestinal problems three months after discharge.

Discussion and Literature Review

The association of *S. bovis* with carcinoma of the colon and with benign colonic lesions has been well documented. The GDNES in our case was not further identified as *S. bovis*. The difficulty of the differentiation between enterococcal and GDNES is discussed by Hoppes[5] and Raverby.[6] We encountered this same difficulty when our culture was first identified as *S. viridans*.

Klein *et al.*[4] (1977) published a study in which stool cultures from 280 subjects were reviewed. These were divided into seven groups. The group studied included 63 patients with carcinoma of the colon, 112 patients with benign gastrointestinal disorders, and 105 patients without bowel disease. Their study showed that patients with colonic carcinoma had a 58 percent greater chance of having GDNES in their stools than both of the control groups without underlying malignancy.

Klein *et al.*[7] published another study in 1977, in which 29 patients were evaluated for 30 episodes of *S. bovis* bacteremia. Nine of these patients had no gastrointestinal complaints on admission. Of 15 who underwent complete colonic studies, 8 were found to have carcinoma of the colon, 3 had adenomatous polyps and 2 had carcinoma of the esophagus. Of the 14 patients incompletely evaluated, a colonic mass was present in 3, in addition to single cases of carcinoma of the stomach, gastric lymphoma, and an adenomatous polyp. Their studies suggested that lesions of the colon were likely when *S. bovis* bacteremia is present.

Murray and Roberts[8] reported a study in 1978 of 36 patients, 26 with endocarditis and 10 with *S. bovis* bacteremia alone. Of 25 patients with gastrointestinal lesions, in 22 the lesion was considered to be the portal of entry. Two of these had carcinoma of the colon, 2 had potentially malignant villous adenomas, and 2 had benign polyps. None of the 22 related any gastrointestinal symptoms.

Reynolds *et al.*[9] in 1983 reviewed 19 patients with endocarditis and *S. bovis* bacteremia. Three were found to have adenocarcinoma, 4 benign adenomatous polyps, and 8 had diverticulosis.

Table 1 summarizes 21 descriptive clinical case studies that document the association of GDNES endocar-

ditis with colonic lesions. The age and sex distribution showed a slight predominence of males, with most of the cases occurring in the two decades between 50 and 70 years of age (Table 2). Thirty six different colonic lesions were associated with the presence of endocarditis. In some patients, more than one associated lesion was present. The most frequent association was with adenocarcinoma of the colon, which occurred in 15 of the cases. Adenomatous polyp of the colon occurred in 12. Diverticula were responsible for 4. Fecal impaction had not been reported prior to the description of the present case. These are summarized in Table 3.

Although in a number of cases the report of the cardiac condition is not specifically defined and sometimes only the syndrome is identified, nonetheless, 16 of the 28 cases appear to be associated with previously damaged or incompetent left-sided cardiac valves (Table 4).

In summary, this documented association underscores the need to evaluate all cases of GDNES bacteremia, not only for endocarditis but also for benign and malignant colonic lesions. Periodic colonic reexamination is strongly recommended for all cases with previous GDNES bacteremia.

Table 3. Review of Case Studies: Summary of Underlying Gastrointestinal Problem

Conditions*	Number of Cases
Fecal impaction	1
Adenocarcinoma	15
Gastric polyp	1
Colostomy with closure	1
Diverticulitis	4
Probable cancer of colon (by liver biopsy)	1
Adenoma (polyp) of colon	12†
Hemorrhoids	1
Total	36

* Some patients more than one condition.
† One patient with adenomatous polyp developed carcinoma of colon two years later.

Table 4. Underlying Heart Disease

Condition(s)*	Number of Patients
Rheumatic heart disease†	5
Mitral stenosis†	1
Mitral incompetency†	3
Prosthetic valve†	
Mitral	2
Aorta	2
Previous bacterial endocarditis†	3
Atrial fibrillation	2
Congestive heart failure	2
Myocardial infarction	3
Hypertension	2
Ventricular septal defect	1
Murmur etiology not stated	1
Unspecified heart disease	1
Total	28

* Some patients more than one condition.
† Previously damaged or incompetent left-sided cardiac valves.

References

1. McCoy, W.C. and Mason, J.M. "Enterococcal Endocarditis Associated with Carcinoma of the Sigmoid." *J Med Assoc Ala* 21(1951):162–66.

2. Roses, D.F.; Richman, H.; and Localio, S.S. "Bacterial Endocarditis Associated with Colorectal Carcinoma." *Am Surg* 179(1974):190–91.

3. Keusch, G.T. "Opportunitistic Infections in Colon Carcinoma." *Am J Clin Nutr* 27(1974):1481–85.

4. Klein, R.S.; Recco, R.A.; Catalano, M.T.; Edberg, S.C.; Casey, J.I.; Steigbegel, N.H. "Association of *Streptococcus bovis* with Carcinoma of the Colon." *N Engl J Med* 297(1977):800–802.

5. Hoppes, W.L. and Lerner, P.I. "Non-enterococcal Group-D Streptococcal Endocarditis Caused by *Streptococcus bovis*." *Ann Int Med* 81(1974):588–93.

6. Ravreby, W.D.; Bottone, E.F.; Keusch, G.T. "Group D Streptococcal Bacteremia, with Emphasis on the Incidence and Presentation of Infections due to *Streptococcus bovis*." *N Engl J Med* 289(1973):1400–1403.

7. Klein, R.S.; Catalano, M.T.; Edberg, S.C.; Casey, J.I.; Steigbigel, N.H. "*Streptococcus bovis* Septicemia and Carcinoma of the Colon." *Ann Int Med* 91(1979):560–62.

8. Murray, H.W. and Roberts, R.B. "*Streptococcus bovis* Bacteremia and Underlying Gastrointestinal Disease." *Arch Intern Med* 138(1978):1097–98.

9. Reynolds, J.G.; Silva, E.; McCormick, W.M. "Association of *Streptococcus bovis* with Bowel Disease." *J Clin Microbiol* 17(1983):696–97.

10. Silver, S.C. "*Streptococcus bovis* Endocarditis and its Association with Colonic Carcinoma." *Dis Colon Rectum* 27(1984):613–14.

11. Bayliss, R.; Clarke, C.; Oakley, C.M.; Somerville, W.; Whitefield, A.G.W.; Young, S.E.J. "The Bowel, the Genitourinary Tract, and Infective Endocarditis." *Br Heart J* 51(1984):339–45.

12. Robbins, N. and Klein, R.S. "Carcinoma of the Colon 2 Years After Endocarditis due to *Streptococcus bovis*." *Am J Gastroenterol* 78(1983):162–63.

13. Hossenbux, K.; Dale, B.A.; Walls, A.D.; Lawrence, J.R. "*Streptococcus bovis* Endocarditis and Colonic Carcinoma: a Neglected Association." *Br Med J* 287(1983):21.

14. Jolobe, O.M.P.; Donnovan, I.; Melnick, S.C. "*Streptococcus bovis* and Colonic Polyp" [letter]. *Postgrad M J* 59(1983):738.

15. Kewal, N.; Seneviratne, B.I.B.; Wilkinson, R.K.; Seneviratne, E.M.E. "Asymptomatic Colonic Carcinoma Revealed by Investigation of *Streptococcus bovis* Bacteremia." *Aust NZ J Med* 13(1983):173–74.

16. Belinkie, S.A.; Narayanan, N.C.; Russell, J.C.; Becker, D.R. "Splenic Abscess Associated with *Streptococcus bovis* Septicemia and Neoplastic Lesions of the Colon." *Dis Colon Rectum* 26(1983):823–24.

17. Cobb, B.W.; Danzi, J.T.; Carey, K.Y.; Smaha, L.A. "*Streptococcus bovis* and Colonic Neoplasia." *Penn Med* 85(1982):20–22.

18. Shoenbaum, S.C.; Aretz, T.H.; Scully, R.E.; *et al.* "Fever, Heart Murmur and Atrial Fibrillation in a 72 Year-Old Woman—Bacterial—Endocarditis, Acute, *Streptococcus bovis*, of the Aortic Valve,

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19. Saltzman, M.; Brand, M.H.; McKinley, M. "*Streptococcus bovis* Endocarditis and Colon Carcinoma." *Conn Med* 45(1981):139–40.

20. Seaman, W.B. "The Case of *S. bovis* Endocarditis." *Hosp Pract* 6(1981):25, 31.

21. Marshall, J.B. and Gerhardt, D.C. "Polyposis coli Presenting with *Streptococcus bovis* Endocarditis." *Am J Gastroenterol* 75(1981):314–15.

22. Warren, J.; Louie, K.G.; Greenspahn, B.R.; Karunaratne, B. "*S. bovis* Endocarditis on a Prosthetic Heart Valve with a Colonic Neoplasm" [letter]. *N Engl J Med* 304(1981):1239–40.

23. Manzella, J.P. "*Streptococcus bovis* Bacteremia: Diagnosis of Neoplasms by Colonoscopy." *South Med J* 74(1981):999–1000.

24. Ribaudo, T.P. and Januzzi, J.L. "*Streptococcus bovis* Bacteremia Following Surgical Cure of Colonic Cancer." *Am Gastroenterol* 76(1981):542–43.

25. Dunham, W.R.; Simpson, J.H.; Feest, T.G.; Cruikshank, J.G. "*Streptococcus bovis* Endocarditis and Colorectal Disease" [letter]. *Lancet* 8165(1980):421–22.

26. Noble, C.J.; Uttley, A.H.; Falk, R.H.; Richardson, P.J.; "*Streptococcus bovis* Endocarditis and Colonic Cancer." [letter]. *Lancet* 1(1978):766.

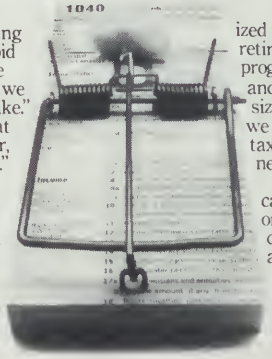
27. Smith, T.R.; Friedman, S.M.; Adler, H. "*Streptococcus bovis* as a Clue to Colon Neoplasms in Two Cases." *Am J Roentgenol* 131(1978):887–88.

28. Crowley, J.P.; Ahola, S.; Beher, J. "*Streptococcus bovis* and Colonic Lesions" [letter]. *Ann Int Med* 89(1978):1009–10.

29. Levy, B.S.; von Reyn, C.F.; Arbeit, R.D.; Grumpacker, C. "More on *Streptococcus bovis* and Bowel Carcinoma." *N Engl J Med* 298(1978):572–73.

30. Steinberg, D. and Naggar, C.Z. "*Streptococcus bovis* Endocarditis with Carcinoma of the Colon" [letter]. *N Engl J Med* 297(1977):1354–55.

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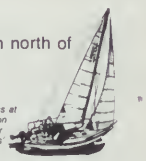
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Miscellaneous Meetings

Oct 24 Understanding the Terrorist and the Victim, sponsored by the Psychiatric Institute Foundation; DC Medical Society Auditorium, 2007 I (eye) St. NW, Washington; 8 a.m.–4:15 p.m. Fee: $95 regular, $60 student, $39 Georgetown student; 6 CME Cat I credits for physicians, 6 Cat A credits for psychologists, 6 National Board Certified Counselors credits. Info: A. Cannamela, 4460 MacArthur Blvd. NW, Washington, DC 20036 (202-828-1888).

Oct 25 MAFP Mini Conference—Medical Legal Issues for Family Physicians, Hyatt Regency Bethesda. 5 AMA Cat I credits, 5 AAFP Prescribed credits. Info: John B. Umhau, Jr., MD, 1204 Maryland Ave. Baltimore, MD 20201 (301-659-0640).

Nov 13–14 Current Controversies in the Management of Prostate Carcinoma, Hyatt Regency Hotel, Inner Harbor, Baltimore, sponsored by the American Cancer Society, held in conjunction with the Mid-Atlantic Oncology Program. Info: K. T. Drake MD, Chairman, Dept. of Radiation Oncology, GBMC, 6701 N. Charles St., Baltimore, MD 21202 (301-828-2540).

Nov 14–15 Regional Scientific Continuing Medical Education Meeting, American College of Physicians, Annapolis. Info: F.M. Calia MD, VA Medical Center, Medical Services (111), 3900 Loch Raven Blvd., Baltimore, MD 21218 (301-467-4824).

Nov 18 The Glomerular Response to Renal Injury, C.W. Stewart Memorial Lecture at Maryland General Hospital. Speaker: Barry M. Brenner MD, Harvard Medical School. Info: 301-225-8790.

Nov 19 Panic Disorders, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

Dec 8–10 NIH Consensus Development Conference—Diet and Exercise in Noninsulin-Dependent Diabetes Mellitus, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info and registration: S. Feldman, Prospect Assoc., Ste 500, 1801 Rockville Pike, Rockville, MD 20853 (301-468-6555).

Dec 17 The Application of Bowen Family Systems Theory to Spouse Abuse, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

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Oct 30–31 A Scientific and Educational Symposium: Technology Assisted Children at Home, Washington Sheraton, Washington, DC. Fee: $85; appropriate credit pending. Info: P. Macedonia, 301-955-6085.

Nov 1–2 Hemodynamic Monitoring/Patient Care and Pulmonary Artery Catheterization. Fee: $360; 14 AMA Cat I credits. Info: J. Ryan, 301-955-6046.

Nov 7–8 Clinical Update in Allergy for the Practicing Physician. Fee: $125; 10 AMA Cat I credits. Info: P. Macedonia, 301-955-8085.

Nov 14–15 Progress in Pediatrics. Fee: $90 physicians, residents and fellows with letter verifying status $45; 11 AMA, 11 PREP credits, other appropriate credit pending. Info: J. Ryan, 301-955-6046.

Nov 14–16 The New World of Public Health—Hopkins as a Resource, Annual Meeting and Scientific Symposium, sponsored by The Johns Hopkins School of Hygiene and Public Health, 615 N. Wolfe St., Baltimore. 12 AMA Cat I credits. Info: Marcia G. Pines, Executive Director 301-955-3795.

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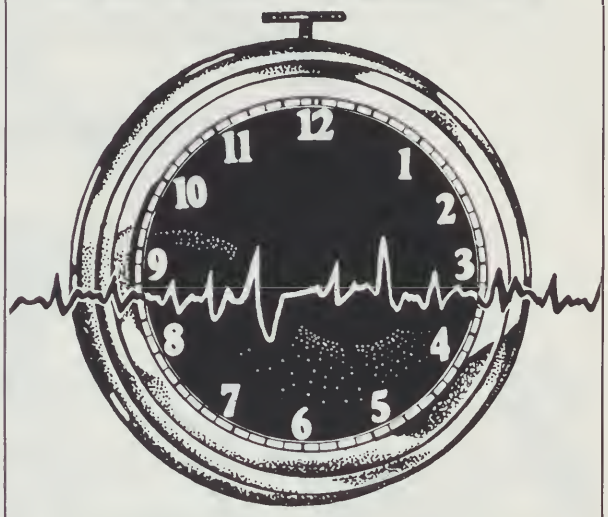
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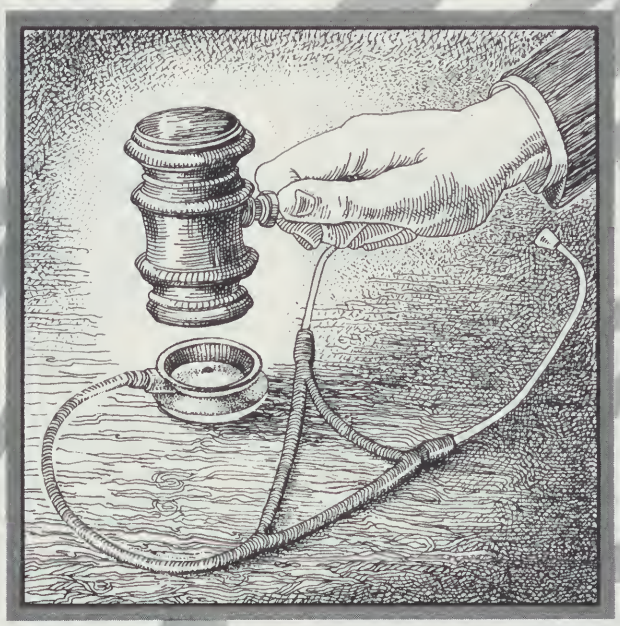
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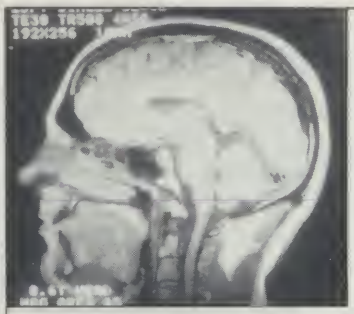
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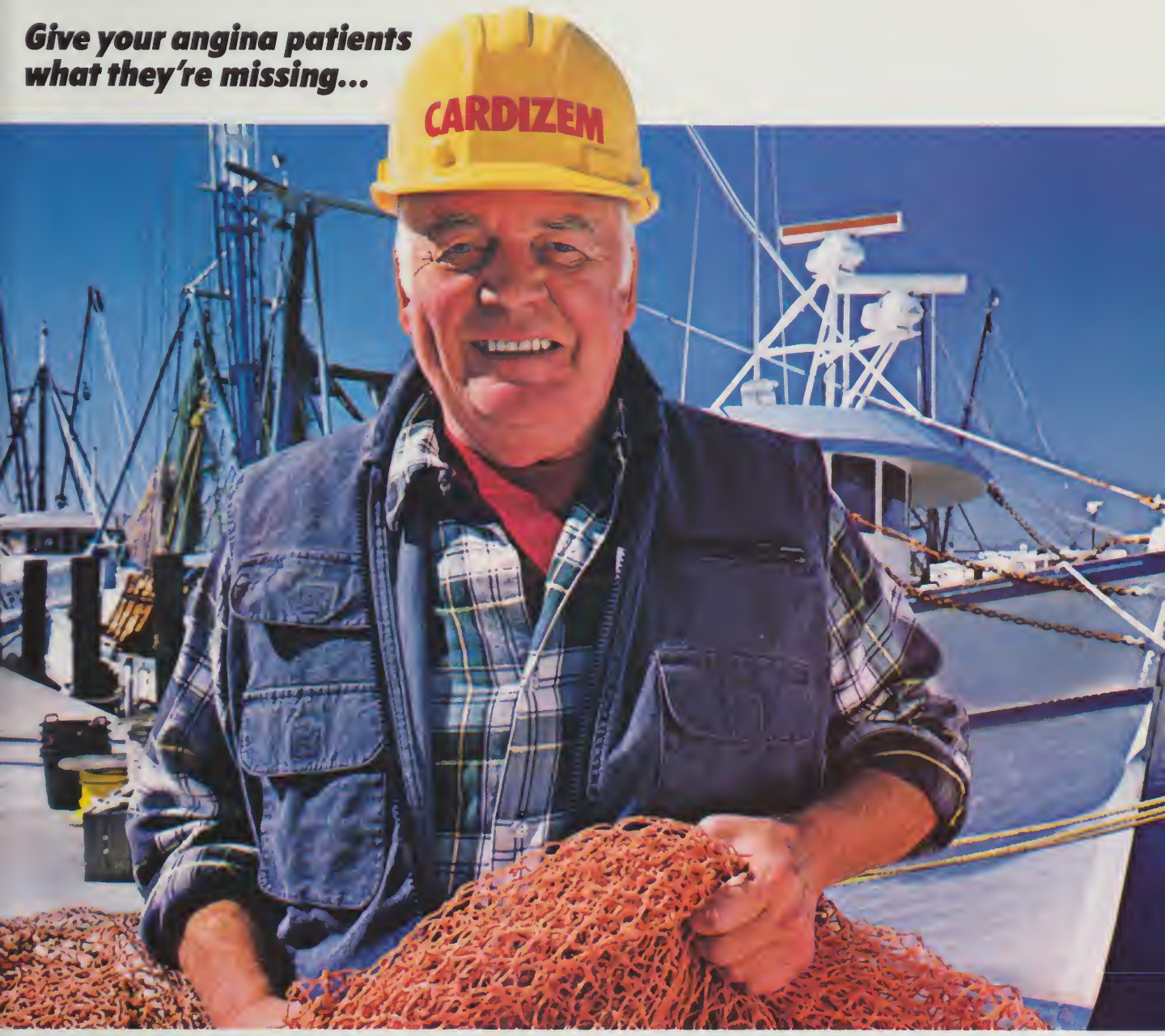
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- ***A safe choice for angina patients with coexisting hypertension, asthma, COPD, or PVD[4,5]***

***See Warnings and Precautions.**

Please see brief summary of prescribing information on the next page.



CARDIZEM® FEW SIDE EFFECTS IN ANTIANGINAL THERAPY

diltiazem HCl/Marion

60 mg tid or qid

Brief Summary
Professional Use Information

CARDIZEM®
(diltiazem HCl) 30 mg and 60 mg Tablets

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt).
   Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.
Nervous System:	Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.
Gastrointestinal:	Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.
Dermatologic:	Petechiae, pruritus, photosensitivity, urticaria.
Other:	Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

Issued 7/86

See complete Professional Use Information before prescribing.

References: 1. Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347. **2.** Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159. **3.** Johnston DL, Lesoway R, Human DP, et al: Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol 1985;55:680-687. **4.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **5.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.

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J-6138 January 1986

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* **WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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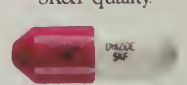
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ZANTAC® 150 h.s.

ranitidine HCl/Glaxo 150 mg tablets

EFFECTIVE MAINTENANCE THERAPY

for healed duodenal ulcer patients

CONFIRMED

In two randomized, double-blind, and well-controlled clinical trials, ZANTAC 150 mg h.s. significantly superior to cimetidine 400 mg h.s. for maintenance therapy in healed duodenal ulcers.

Percent of patients with observed duodenal ulcer recurrence

		0-4 months	0-8 months	0-12 months	No. patients
USA[1]	ranitidine 150 mg h.s.	9%	14%*	16%†	60
	cimetidine 400 mg h.s.	23%	34%	43%	66
UK, Ireland, Australia[2]	ranitidine 150 mg h.s.	8%‡	14%‡	23%‡	243
	cimetidine 400 mg h.s.	21%	34%	37%	241

*p=0.02
†p=0.01
‡p≤0.004
%=life-table estimates
All patients were permitted prn antacids for relief of pain.

These two trials used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

The superiority of ranitidine over cimetidine in these trials indicates that the dosing regimen currently recommended for cimetidine is less likely to be as successful in maintenance therapy.

Convenient once-a-night dose with a

low incidence of side effects[3]

Headache, sometimes severe, seems to be related to ranitidine administration. Other side effects have been reported; for a complete listing, see the **ADVERSE REACTIONS** section in the Brief Summary.

No significant interference with the hepatic cytochrome

P-450 enzyme system at recommended doses

ZANTAC 150 mg has no significant drug interactions with theophylline, phenytoin, or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications that decrease gastric acidity are administered.

Zantac® 150

ranitidine HCl/Glaxo 150 mg tablets

One tablet at bedtime
for maintenance

See next page for references and
Brief Summary of Product Information.

Glaxo / ROCHE®

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Zantac® 150

ranitidine HCl/Glaxo 150 mg tablets

One tablet at bedtime for maintenance therapy in healed duodenal ulcer patients

References:

1. Silvis SE, Griffin J, Hardin R, et al: Final report on the United States multicenter trial comparing ranitidine to cimetidine as maintenance therapy following healing of duodenal ulcer. *J Clin Gastroenterol* 1985;7(6):482-487.
2. Gough KR, Korman MG, Bardhan KD, et al: Ranitidine and cimetidine in prevention of duodenal ulcer relapse: A double-blind, randomised, multicentre, comparative trial. *Lancet* 1984;ii:659-662.
3. Data available on request, Glaxo Inc.

ZANTAC® 150 Tablets (ranitidine hydrochloride)
ZANTAC® 300 Tablets (ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary.

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD).** Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy. 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosage is 150 mg at bedtime.

Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome): The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosage is 150 mg twice a day.

GERD: The current recommended adult oral dosage is 150 mg twice a day.

See full prescribing information for dosage adjustment for patients with impaired renal function.

HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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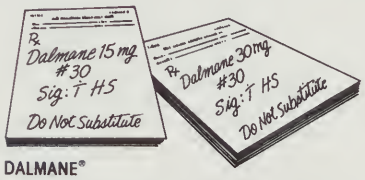
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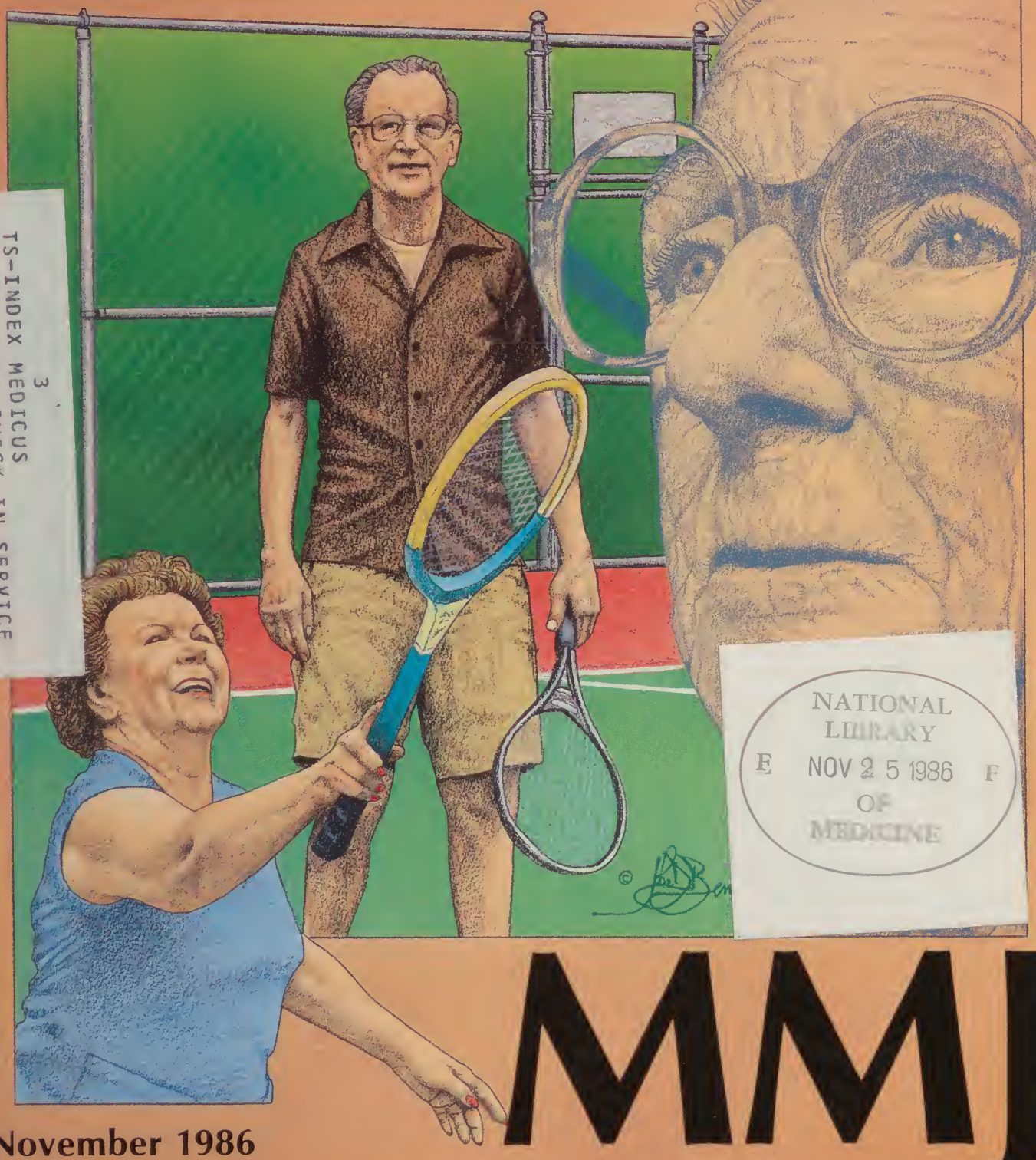


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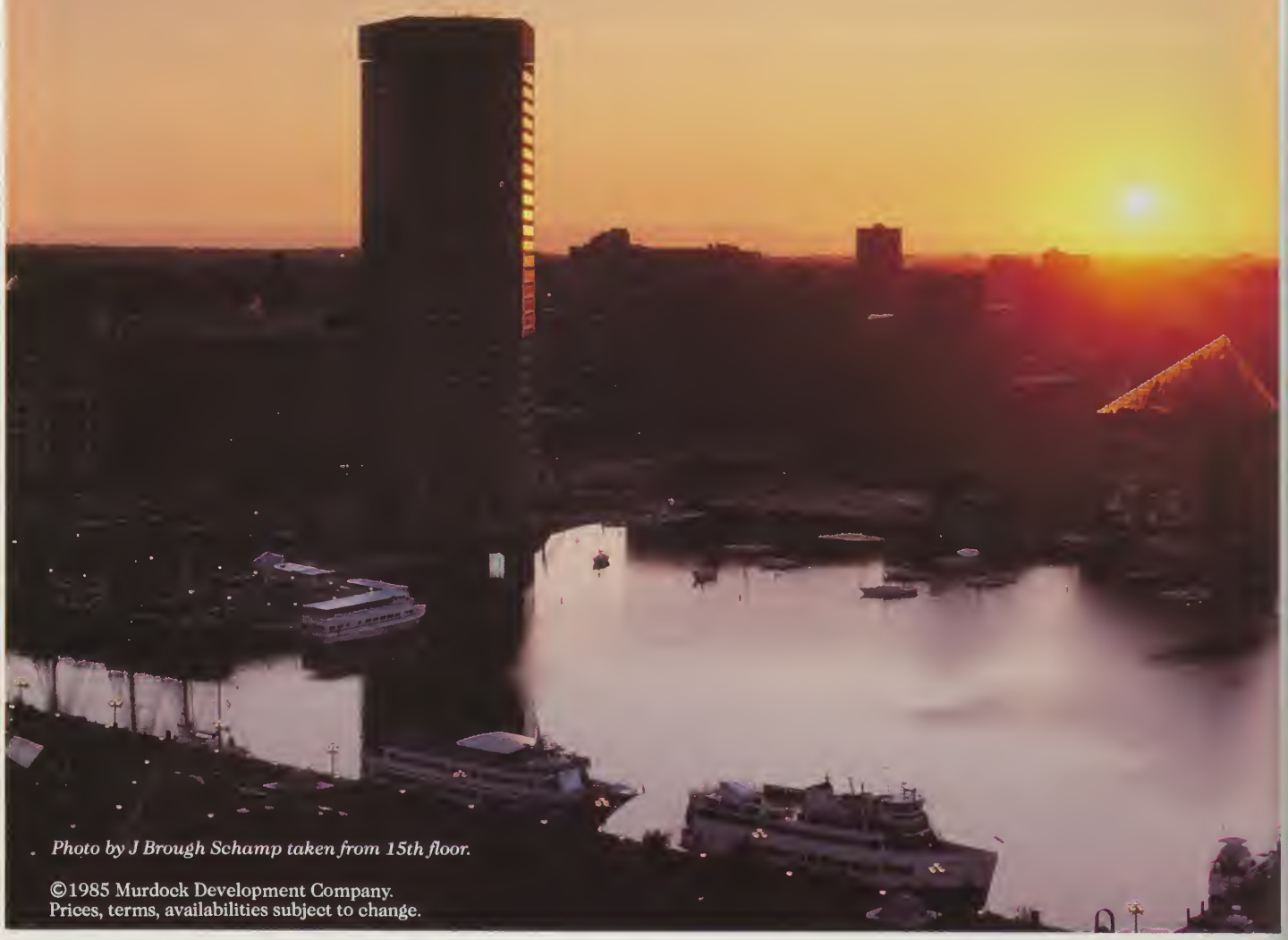


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Health Fair at Hagerstown

October 19, 1985 witnessed the first Health Fair at the Maryland Correctional Institution in Hagerstown. It was sponsored by the Community Correctional Services Committee of Washington County and chaired by Margaret Comstock, an Auxilian responsible for involving the Auxiliary to the Washington County Medical Society.

With health education as the goal, twelve community health agencies participated and over 40 inmates visited the fair. Participating agencies had booths with posters, films, pamphlets, demonstrations, and some tests (vision, blood pressure, height and weight) were given.

Bobbie Niklewski organized and manned the booth for the Auxiliary. Drawings for health prizes (soap and washcloth, toothbrush and toothpaste, brush and comb, etc.) were held during the day. Five or six wrapped gifts were given to appreciative inmates from each tier who came to the fair.

We congratulate Washington County on their innovative community service health education project.

Catastrophe House Targets Safety

Children viewing the Auxiliary to the Howard County Medical Society's exhibit at the county fair named the doll house displayed "Catastrophe House" because of its many examples of unsafe activities and its fire escape plan. Several school teachers expressed interest in using the house as part of their first grade curricula. The house was just part of the Auxiliary's exhibit at the fair. Also on display were brochures provided by the Maryland Auxiliary and the AMA Auxiliary, and bumper stickers that read "Love Life: Buckle Up."

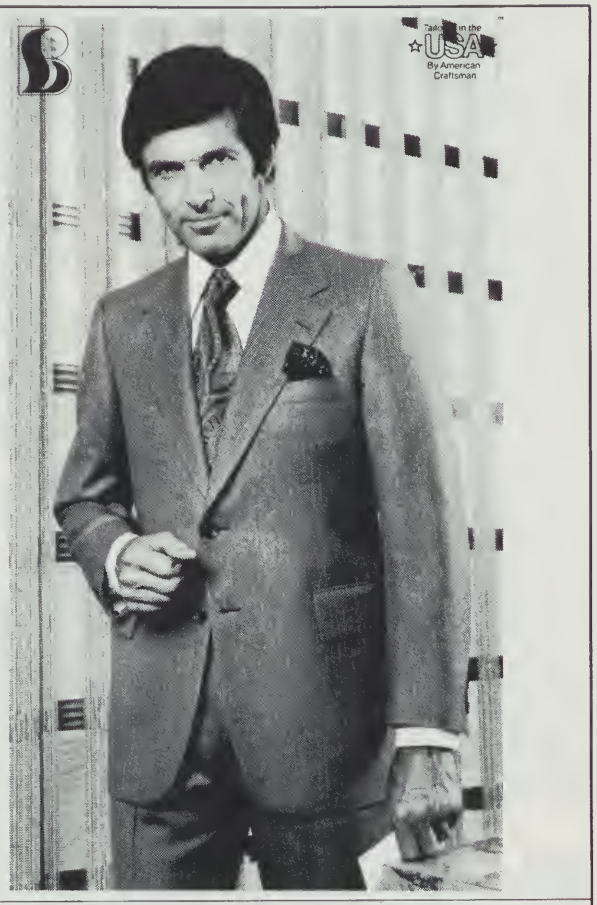
The exhibit was one of a series of events planned by Auxilians Melissa Leffler, Kassie Herbert, and Pat Bahr to publicize its efforts for community service. Other programs included working with the public, community groups, the schools, and the medical society to promote health education and service within the community.

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In other words, in the well-controlled or moderately well-controlled insulin-dependent diabetic patient and the noninsulin dependent patient exercise will cause a fall in the blood glucose level, and adjustments for possible hypoglycemia must be considered.

In the poorly controlled insulin-dependent diabetic patient (blood glucose 350 mg/dl or more) there is a risk of worsening the diabetic state by exercise.

Nevertheless, the important clinical implication is that exercise should be viewed as an adjunct rather than an alternative to careful management of insulin-dependent diabetes with proper doses of insulin. Exercise is a very important component in the triad (exercise-diet-insulin) for the management of diabetes and should not be avoided.

De WITT E. De LAWTER MD
Editor

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NOVEMBER NEWSLETTER
DISINFECTION OF FIBEROPTIC ENDOSCOPES IN PHYSICIAN OFFICES

RATIONALE:

While the risk of infectious complication related to endoscopic procedures has not been well documented, there have been some outbreaks of infection which have been attributed to inadequate cleaning and disinfection of endoscopic equipment. Current recommendations from the Centers for Disease Control (CDC) state that instruments including endoscopes, that will come into contact with intact mucous membranes can be used with reasonable assurance of being free of pathogens after meticulous physical cleaning followed by high-level disinfection.

PROCEDURE FOR HIGH-LEVEL DISINFECTION OF FIBEROPTIC ENDOSCOPES IN PHYSICIAN OFFICES:

1. Thoroughly clean the instrument, removing all blood, mucus and other organic materials. Cleaning the instrument immediately after use will prevent the drying of secretions and facilitate removal of microorganisms prior to chemical disinfection.

2. Immerse the instrument in a hospital-grade disinfectant, being certain that all parts of the instrument are in contact with the disinfectant. The instrument remains immersed in the disinfectant for the period of time recommended by the manufacturer. High-level disinfection requires an immersion time of ten minutes.

3. Thoroughly rinse the instrument with sterile water, to prevent residual toxic effects from the chemical disinfectant.

4. Sterile containers should be used for the immersion and rinsing steps. Sterile gloves should be used to handle the instrument after chemical disinfection.

5. The instrument, including the insertion tubes and inner channels, should be thoroughly air dried after cleaning and prior to storage to eliminate an environment conducive to multiplication of microorganisms.

6. Accessories such as biopsy forceps and cytology brushes have a spring-like structure and are extremely difficult to clean of all organic material. These instruments should be cleaned with a detergent-disinfectant and rinsed. The instruments should then be sterilized by steam under pressure.

SELECTION OF DISINFECTANT CHEMICALS

Chemical disinfectants that are approved by the Environmental Protection Agency for disinfection are gluteraldehyde 2% and Hydrogen peroxide 6%.

Gluteraldehyde disinfectants are produced by several companies. A telephone survey of manufacturers indicated that immersion in a solution of gluteraldehyde 2% will accomplish high-level disinfection in ten minutes.

The Hepatitis B virus is inactivated by both Hydrogen peroxide 6% and Gluteraldehyde 2% disinfectants. Hydrogen peroxide 6% also inactivates the Human T-Lymphotropic Virus Type III/Lymphadenopathy Associated Virus (HTLVIII/LAV).

The HTLVIII-LAV is known to be a fragile virus, inactivated by every disinfectant tested. Gluteraldehyde 2% has not yet been documented to inactivate the virus but it is expected that the documentation will soon be available.

Gluteraldehyde phenate 1:16 dilution has been demonstrated to be effective in killing the HTLV III virus in 10 minutes at 20C.

STERILIZATION OF ENDOSCOPES USED IN STERILE PROCEDURES

Endoscopes that are used in areas of the body in which sterility must be maintained must be sterilized. Arthroscopes and laparoscopes are examples. Sterilization of the instrument requires a minimum of two hours of immersion. In all cases, the manufacturer's instructions are to be followed.

Ethylene oxide sterilization is the method of sterilization for instruments that are damaged by steam under pressure, dry heat and long periods of chemical immersion.

Further questions regarding endoscope disinfection, should be referred to Ms. Pat Powers, (301) 225-6712.

LEAD IN SCHOOL DRINKING WATER

BACKGROUND:

The Office of Environmental Programs, Department of Health and Mental Hygiene, has initiated a statewide screening program to identify public schools which may exceed U.S. Environmental Protection Agency (EPA) standards for lead in drinking water. This program has specifically focused on schools with plumbing which is less than four years old, since these are the facilities most likely to have lead contaminated water.

The current EPA maximum contaminant level (MCL) for lead in drinking water is 0.05 mg/l. The National Academy of Sciences (Drinking Water and Health, 1984) has stated that this standard may not, in view of other sources of environmental exposure, provide a sufficient margin of safety, particularly for prenatal and early childhood exposures. Initial sampling indicated that water in several schools exceeds the MCL; some schools exhibit notably high levels ranging up to 1.09 mg/l.

The primary source of lead in drinking water in Maryland is solder and flux used to connect copper pipe. Water which has been standing in a plumbing system for as little as two hours can develop an elevated level. Previous studies of Maryland residential plumbing systems indicate that a protective film forms on the interior of the plumbing, generally within four years of use, and that, unless the water supply is corrosive, elevated lead levels are uncommon in older plumbing systems.

PUBLIC HEALTH CONSIDERATIONS:

The measures taken to reduce lead levels in school water supplies are intended to address only one source of lead in a child's environment. Additional and probably more significant sources include old paint, household dust and soil contaminated with lead from either paint or gasoline derived air pollution. Children also may have lead exposure from contamination of their home drinking water or other miscellaneous sources. Except in unusual circumstances, it is unlikely that a child would ingest enough lead from school water alone to cause acute or chronic lead poisoning. The intention in the screening of schools was to identify a preventable exposure. Lead has no beneficial properties and is believed harmful at any level studied. The developing fetus seems particularly sensitive to relatively low levels of exposure.

RECOMMENDATIONS FOR FOLLOW-UP

Unless a child has other significant exposure sources, it is probably unnecessary to screen children at affected schools for elevated blood lead levels (or FEP) at this time. Some local health officers have opted to offer screening to concerned families. It should be noted that the U.S. Centers for Disease Control (CDC) recommend routine screening of all children between the ages of 9 months and 6 years. The Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program specifically provides for FEP screening at 18 months, 24 months, and 36 months of age.

It may be appropriate to provide follow-up for female school staff members who may have consumed water with very high lead levels over a period of several years. Teachers and other staff may use the first morning draw of water to make coffee or tea as a matter of habit. While their level of exposure may be insufficient to cause lead poisoning, they may accumulate enough lead to reduce fertility or to cause toxic effects to a developing fetus.

Submitted by the Office of Environmental Programs, Division of Environmental Disease Control.

***ATS QUARTERLY STATISTICS

	1985	1986 1st Quarter	1986 2nd Quarter	1986 July	1986 August	1986 September	1986 3rd Quarter	1986 Grand Total
Number of persons receiving pretest counseling	1742	713	593	242	211	257	710	3758
Number of persons tested	1698	684	570	227	200	253	680	3632
ELISA results:								
Positive	225**	87	64	34	23	22	79	455**
Negative	1472	578	504	186	175	201	562	3116
Pending as of 10/25/86	1+	19*+	2	1	0	32	33	55**
% positive of results known	13.3%	13.1%	11.3%	15.5%	11.6%	9.9%	12.3%	12.7%
Western Blot results:								
Number done	231	87	64	34	23	22	79	461
Positive	204	73	55	33	23	22	78	410
Negative	27	14	9	1	0	0	1	51
% positive ELISA also positive on Western Blot	90.7%	83.9%	85.9%	97.1%	100%	100%	98.7%	90.1%**
Number returning for post test counseling (%)	1351 (79.6%)	487 (71.2%)	375 (65.8%)	156 (68.7%)	153 (76.5%)	154 (60.9%)	463 (68.1%)	2676 (73.7%)

\+ no lab record on one specimen

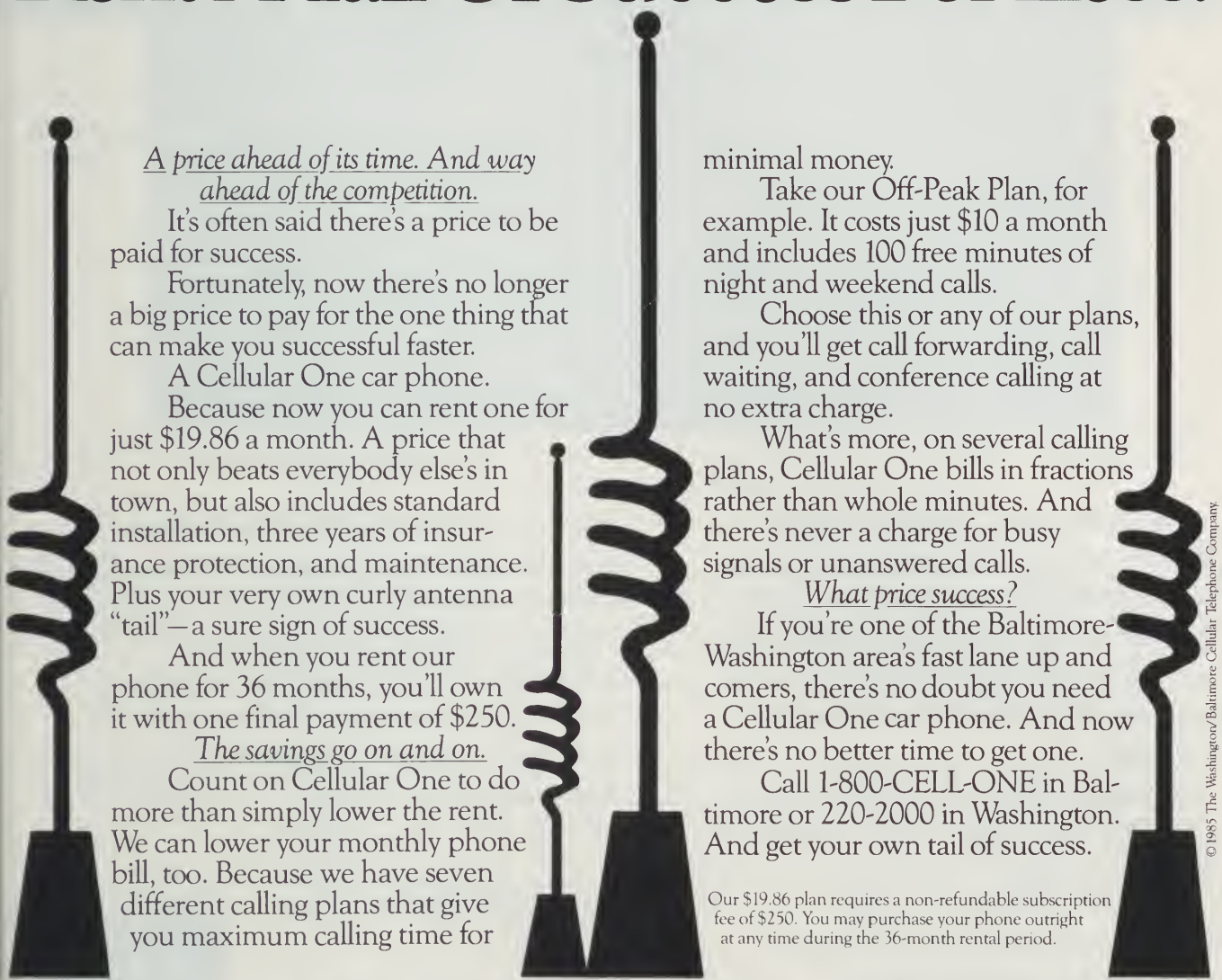
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Executive Director's Newsletter

November 1986

BLUE CROSS BLUE SHIELD REIMBURSEMENT SYSTEM

Many of you have received notice from Blue Cross and Blue Shield regarding the application of participating agreements to major medical programs. Those changes will require, among other things, that participating physicians bill BC/BS directly on behalf of the patient and refrain from billing the patient for deductible or co-payment until after the patient receives an explanation of benefits.

The Faculty has protested this action, pointing out the serious cash-flow and administrative problems resulting from these changes. As always, each physician must weigh the decision to participate in the BC/BS plan against his or her office's needs. Questions regarding this issue may be directed to Michael Murray at the Faculty office.

MEMBERSHIP SURVEY

During the last week of October, we mailed a survey to all active members of Med-Chi asking for an overview of your attitudes and opinions about the status of the profession in Maryland as well as some demographic data about the practice of medicine in our state.

Please complete the survey and return it to the Faculty office as soon as possible. A positive response to this survey will assist the Faculty in better representing you and the profession to the public, the media, and the Legislature.

The confidentiality of survey responses will be strictly assured. If you have questions concerning the survey, please contact John Stierhoff in our Government Relations Department.

QUICK RESPONSE NETWORK

To better represent the views of our members, we are developing a Physician's Quick Response Network to gather information and opinions from members on questions and issues on which we are considering taking a position. Please participate in this program by completing the registration form on the next page.

LEGISLATIVE RECEPTIONS

As we did four years ago, Med-Chi is sponsoring a series of receptions throughout the state during November for component society leadership and those members actively involved with legislation to meet with legislators. This will likely be the first contact newly elected legislators will have with members of organized medicine.

TASK FORCE ON IPAS FORMED

The Executive Committee has appointed Leon Kassel MD as Chairman of a task force to investigate the feasibility of forming a statewide IPA with the ability to contract for medical services on behalf of Maryland physicians.

DECISION OF INSURANCE COMMISSIONER

In September, the Maryland Insurance Commissioner's Office issued a ruling allowing the Pacific Employer's Insurance Company to discontinue its programs of professional liability insurance for Obstetrician/Gynecologists through the American College of Obstetricians and Gynecologists. This ruling may now allow an insurance company to choose the medical specialties it will insure, thus excluding the less profitable, high-risk specialists.

The Executive Committee is very concerned about the situation and carefully weighed the effect of appealing this decision. A reading of the applicable caselaw seems to indicate that Maryland law requires a liability insurance carrier to write an entire line of insurance (that is medical malpractice insurance) without excluding particular classes within that line (for example Obstetrician/Gynecologists). However, weighed against the caselaw was the potential effect of a successful appeal on insurance programs offered through national specialty societies

In the final analysis, it was determined that the potential harm to the national specialty insurance programs outweighed the harm flowing from the ruling, and a decision not to proceed with an appeal was made. The Faculty is studying ways to approach this problem legislatively and we will keep you informed of our progress.

MAGAN CASE

As you may recall, the Circuit Court decision in the case of Michael Magan MD has been appealed to the Court of Special Appeals. The Faculty's Executive Committee at its last meeting approved the filing of an appearance as amicus curiae (friend of the court) in the case. The Faculty's brief will address the single issue of whether Medical Mutual Insurance Society's underwriting standards comply with Maryland insurance regulations.

PLEASE NOTE

We have had several questions from physicians who seem to be confusing the Mutual Fire, Marine and Inland Insurance Company with the General Accident Insurance Company. These are two separate insurance companies. The difficulties currently being experienced by Mutual Fire do not affect General Accident. Questions concerning these companies should be directed to your insurance agent or to Judith Wood, Faculty Legal Counsel.



Executive Director

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Attention All Physicians . . . . .

Med-Chi Wants to Represent Your Point of View

Med-Chi is developing a Physician's Quick Response Network to gather information and opinions from members on questions and issues on which we are considering taking a position.

We are seeking at least 200 Med-Chi physicians from around the state to participate in the program by responding to short surveys on issues that affect the entire medical profession. The criteria for participation is willingness to examine the questions included in the surveys and to respond quickly. Your responses will guide Med-Chi's officers and staff in developing positions on various issues.

In addition to the basic network of some 200 physicians, we are seeking a sample of physicians to answer surveys relating only to their specific specialty. Each specialty list will be proportional to the percentage of Maryland physicians practicing within that specialty.

Med-Chi will mail the surveys in a distinctive envelope identifying the contents as a survey requiring immediate response. A return envelope will be provided.

We need you to participate in the Physician's Quick Response Network. Please complete the postal reply card below and mail it today (or register by calling 539-0872 in Baltimore or toll-free in Maryland 1-800-492-1056). You will receive more information on the program in the near future.

☐

Maryland Physician's Quick-Response Network Registration Form

YES, I will participate in the Maryland Physician's Quick Response Network to help Med-Chi represent my views.

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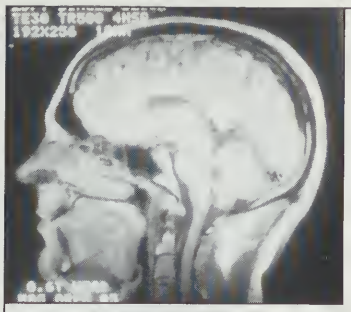
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Aged Living Alone: Health and Resources

JAY MAGAZINER PhD, MICHAEL K. YUHAS MA, and NANCY L. DAY PhD

Data indicate that aged (60+) community residents living alone are only slightly less healthy than and their supports do not differ from those living with others. However, those living alone reported living closer to community services. Relationships between social and community resources and health were generally similar for both those living alone and those living with others.

Magaziner is Assistant Professor and Director of the Gerontology Program in the Department of Epidemiology and Preventive Medicine at the University of Maryland Medical School. Yuhas presently is a program coordinator with Blue Cross-Blue Shield of Maryland and is a doctoral candidate in the Department of Mental Hygiene at the Johns Hopkins University School of Hygiene and Public Health. Day is Associate Professor of Psychiatry and Epidemiology at the University of Pittsburgh and director of the Drug and Alcohol Epidemiology Program at Western Psychiatric Institute and Clinic.

Funding for this research was provided to Magaziner by The Health Education Center of Pittsburgh, the University of Maryland Graduate School Research Fund, and the Bressler Research Fund. He was supported also by NIMH Training Grant 5-T32-MH15169-04 during the data gathering phase of the study and by NIA Grant 1-R01-AGO4366 while preparing this manuscript. An earlier version of this paper was presented at the 36th Annual Meeting of the Gerontological Society of America, San Francisco in November 1983. **Reprints:** J. Magaziner PhD, University of Maryland Medical School, 655 W. Baltimore Street, Baltimore, MD 21201.

Of the 28 million adults over age 65 in this country, more than 30 percent live alone, and the preference for independent living arrangements appears to be increasing among newer members of this group.[1] As this trend continues, the proportion of elderly who live alone will increase substantially, highlighting the need for a better understanding of the health needs of and resources available to this group. At present, very little is known about the health of the aged who live alone, and very little research attention has been paid to this growing segment of the population.

Results from the few studies focused on the aged living alone are generally consistent with findings from studies of the nonaged population, which indicated that persons who live alone are more likely to be physically or mentally ill at any age.[2-6] Most of this research however, looked at the most severe kinds of problems such as suicide, death due to alcoholism, and mental hospitalization: the kinds of problems that remove people from the community. Very little systematic attention has been given to the health of those living alone in the community, where recent studies suggest that those living alone are not always in the poorest health.[7-9]

There is evidence demonstrating the importance of social networks and supports in protecting individuals from psychiatric disorders, physical illness, and even death.[10-13] Further evidence suggests that the community environment also may be supportive and help prevent pathology.[14] Though past research in this area has not looked specifically at those living alone, it is reasonable to expect that having social supports and access to community resources (stores, parks, clubs, people) will help reduce the risk of illness that may be associated with living alone.

Two major purposes guided the present study. The first, based on the lack of knowledge about the health of community resident aged living alone, was to evaluate the physical and mental health of this group. The second was to examine the roles of social supports and community resources in relation to the health of this group.

Methods

Sample Individuals aged 60 and older were identified in early 1982 from participants in the Cooperative Health Risk Reduction Program (CHRRP) in a working-class neighborhood of Pittsburgh. In the initial phase of CHRRP, a random sample of households was selected, and an attempt was made to interview all adults over age 18. Interviews were obtained from 516 individuals, 164 of whom were 60 or older. An attempt was made to locate all individuals age 60 and older for a more in-depth interview concerning their health, living arrangements, social supports, and community resources. Usable data were obtained from 104 (63 percent) of these individuals. Those interviewed were similar to those not interviewed sociodemographically, as well as with regard to smoking habits, alcohol consumption, and the presence of diagnosed hypertension; however, those interviewed were less likely to live by themselves. For our purposes, the three nonwhites in the sample and one case whose data came from a relative have been omitted. Thus, analyses reported here are based on 100 respondents.

Measures **Physical health** Both subjective (self-perceived) and objective (interviewer-rated) assessments were made of physical health. Subjective physical health was measured by response to the question "How would you rate your health, excellent, good, fair, or poor?" The interviewer rating from the physical health portion of the Older American Resources and Services (OARS) instrument served as an objective measure.[15]

Mental health Assessment was made of cognitive status, depressive symptomatology, overall affect, and general mental well-being. The Mini-Mental State examination (MMS) was used to assess cognitive status.[16] This relatively brief measure of mental status measures orientation, registration, recall, attention and calcula-

tion, and language, and resembles a clinician's evaluation. Depressive symptomatology was evaluated using the Center for Epidemiological Studies Depression scale (CES-D) which contains 20 items and is rated by respondents on a four-point frequency scale.[17] Affect was measured using the Affect Balance Scale (ABS), a ten-item scale designed to assess whether an individual has experienced specific positive or negative emotions in recent weeks.[18] The General Health Questionnaire (GHQ) includes 28 items designed to evaluate general mental distress in a primary care setting.[19]

Activities of daily living Activities of daily living (ADL) were measured using a modified version of the OARS instrument, in which summary scores were created based on the respondent's answers to questions regarding ability to perform instrumental and physical activities of daily living.[15] Instrumental activities of daily living included using the telephone, going places out of walking distance, going shopping for groceries or clothing, preparing one's meals, doing housework, taking one's medicine, and handling one's money. The physical activities of daily living items included eating, dressing and undressing, taking care of one's appearance, walking, getting in and out of bed, taking a bath or shower, and using the toilet. Respondents were asked whether they were able to perform each of these tasks without help, with some help, or if they were completely unable to perform them. A summary scale was created based on the respondent's answers to whether or not they could perform these tasks. In addition, the interviewer rated each respondent on a six-point scale ranging from excellent to severely incapacitated, following the OARS approach.

Social support Four dimensions of social support were measured: number of supports (membership in a church or synagogue, belonging to a club or organization, number of close friends, and number of close relatives); frequency of contact with supports (church, club and organization attendance, phone contact with close friends, visits with close friends, phone contact with close relatives, and visits with close relatives); self-perceived quality of support (number of friends and relatives inviting the respondent into his or her home regularly, the presence of a confidant, the presence of someone who can give help for a short time, and the presence of someone who can give help for a long period); and self-perceived satisfaction with support (from friends and relatives).

Community resources Community resources were assessed using a composite index that included the number of contacts with neighbors (number of friendly talks once a week, number of people who could be turned to for advice; number of people who could be called on for assistance); self-reported distance to ten selected community services (grocery store, supermarket, pharmacy, restaurant, beauty or barber shop, library, church or synagogue, park or public sitting area, bus, and emergency medical facility); and estimated use of each of these ten services.

Analysis Those living alone were compared to those not living alone by comparing means using Student's *t*-tests. The relationships between support and resource variables and health variables for the two groups were evaluated independently, using multiple regression analysis. Differences in the relationships between the two groups were then assessed using Student's *t*-test to examine differences in regression coefficients for each relationship. Where no differences were observed, the two groups were combined and regression coefficients were computed for health-support/resource relationships. Age adjustments were made by a *z* transformation technique.[20]

Results

The average age of the entire sample was 71 years. Sixty-nine percent were female, and almost 90 percent had an annual income of less than $15,000. Approximately 30 percent had completed high school, and 74 percent were retired. Fifty-three percent were married, and 32 percent lived alone, which is consistent with national data for this age group.

Depending on the measure of physical health used, between 32 and 42 percent of the sample showed some evidence of impaired physical health. Nineteen percent showed some impairment in cognitive functioning, 21 percent displayed a high level of depressive symptomatology, and 15 percent were rated as impaired on the GHQ, a more global assessment of mental health status. On the interviewer rating of functioning in activities of daily living, almost 30 percent of the respondents showed at least mild impairment.

As expected, the group living alone had a much lower proportion of married individuals. The mean age of the living alone group was greater. They also had lower income levels, which may be attributed in part to the fact that income was reported as total household income. Otherwise, the two groups did not differ demographically.

Table 1 shows the mean scores for all measures of physical and mental health and activities of daily living by living arrangement. The unadjusted scores indicate that those who live alone showed slightly higher levels of impairment on ratings of cognitive functioning and affect and that they were rated by the interviewer as having more impairment in activities of daily living. Since age was related to health, and since those living alone were, on average, older, mean scores on the health measure were adjusted for age. These results (shown in

the far right-hand columns of Table 1) indicate that when age is taken into account, all differences between the two groups in terms of health status were removed.

Differences between the two groups on measures of social support and community resources are reflected in Table 2. While those living alone tended to have fewer supports and to perceive poorer quality and slightly less satisfaction with these supports, these differences were not statistically significant ($p > .05$). Those living alone reported living somewhat closer to ten selected community resources than did those living with others. They also reported greater contact with neighbors (neighborhood ties) and less frequent use of these ten selected services; however, these differences were not statistically significant ($p > .05$).

In addressing the issue of the role of social supports and community resources in relation to health, it can be seen from Table 3 (next page) that the greater the quantity, frequency of contact with, quality, and satisfaction with social supports, the better one's physical and mental health. Similar results were found for activities of daily living, as assessed by the interviewer, and instrumental ADL as reported by the respondents. Physical ADL relationships were either weak or the relationship differed by living arrangement.

With the exception of use of community services, relationships between community resources and health measures were considerably weaker than those found for social supports and health. There was a relationship between the number of neighborhood ties and general level of positive affect (ABS). Distance to services did not appear to be related to health, but those who were healthier made significantly more use of community services.

Overall, the relationship between supports or resources and health did not differ for those living alone and those living with others (the presence of a "d" indicates a difference in the relationship between the living arrangement groups). However, out of 63 interactions examined, 8 were significant, representing a greater than chance occurrence (3 significant interactions might be expected by change alone, $p < .05$). The significant interactions observed involved, for the most part, the relationships between community resources and health.

Table 1. Comparison of Mean Scores on Selected Health and Functioning Variables by Living Arrangement
(Standard deviations shown in parentheses)

	Unadjusted Mean Scores		Age-adjusted Mean Scores	
	Alone	Not Alone	Alone	Not Alone
Physical Health				
Interviewer rating[a]	2.57	2.59	1.91	1.75
	(0.90)	(0.96)	(0.81)	(0.97)
Self-perception[a]	2.25	2.19	2.10	2.15
	(0.80)	(0.88)	(0.71)	(0.74)
Mental Health				
Mini Mental State[b]	25.96	27.43*	26.14	26.81
	(3.88)	(3.23)	(2.97)	(3.20)
Center for Epid. Studies Depression Scale[a]	8.90	8.14	10.75	10.14
	(6.87)	(9.05)	(8.70)	(9.31)
General Health Questionnaire[a]	1.50	2.08	1.65	2.44
	(3.97)	(3.29)	(3.74)	(3.13)
Affect Balance Scale[b]	6.83	7.73*	6.59	7.52
	(2.59)	(2.01)	(2.97)	(2.13)
Activities of Daily Living				
Interviewer Rating[a]	2.30	1.86*	2.47	2.66
	(1.12)	(1.10)	(0.63)	(0.76)
Instrumental[a]	1.52	1.18	0.71	0.94
	(2.20)	(2.61)	(1.21)	(1.71)
Physical[a]	0.19	0.03	0.10	0.08
	(0.65)	(0.18)	(0.34)	(0.11)

[a] Higher score indicates more impairment
[b] Higher score indicates less impairment
* $p < .05$ (1-tailed t test)

Discussion

Data from this study indicate that overall, in contrast to what has been reported in studies of severe pathology, those community resident aged who live alone are only

Table 2. Comparison of Mean Scores on Selected Social Support and Community Resource Measures by Living Arrangement
(Standard deviations shown in parentheses)

	Alone	Not Alone
Social support		
Quantity	5.24	5.91
	(1.99)	(1.59)
Frequency of contact	11.48	11.47
	(4.16)	(4.76)
Quality	5.11	5.92
	(2.36)	(2.09)
Satisfaction	6.68	7.11
	(1.79)	(1.23)
Community resources		
Number of neighborhood ties	9.25	5.52
	(13.16)	(3.95)
Distance to 10 selected services[a]	2.72	3.04*
	(0.49)	(0.93)
Use of 10 selected services[b]	3.37	3.81
	(1.62)	(1.90)

[a] Average number of blocks to the selected services
[b] Average number of services used regularly
* $p < .05$ (2-tailed t test)

slightly less healthy than those living with others. Furthermore, this difference does not seem to be accounted for by the living arrangement per se and is likely a result of the fact that those who live alone are also older.

Those living alone did not differ from those living with others on the measures of social support used in this investigation. They did tend to live closer to community services, which may be a function of the type of housing found nearest to the business district of the neighborhood. While this residential clustering may be a function of urban living, the sample used here comes entirely from an urban area, thus urban-nonurban differences do not account for these results. Our data suggest that those living alone in this urban community are not particularly cut off from social ties and access to community services and thus are not likely to be socially isolated.

In general, as would be expected from prior research, those who were healthier also had better social supports and made more use of community resources. For the most part, the relationship between health variables and social supports and community resources did not differ for those who did and did not live alone. However, in at least some instances, social supports and community resources were related to health in different ways for those who did and did not live alone. Thus, these data suggest that social supports and community resources may, in some instances, have different meanings in relationship to the health status of those living alone versus those living with others.

The results presented here are based on a small and socioeconomically homogeneous sample, which dictates caution in their interpretation and generalizability. Some of the measures used also may be limited. Further, the data are cross-sectional and cannot address the very important issue of whether supports and resources protect a person from developing health problems or whether those who are healthier are more able to sustain supportive relationships and continue to use community resources. Furthermore, as noted earlier, in the original sample of subjects contacted, the group who refused to participate was somewhat more likely to live alone. Had more of these people been included, the results obtained might have been different.

It also should be noted that, while some differences in health and functioning were observed between the group living alone and those living with others, the group as a whole was rather healthy. Analyses relied on mean values of some health measures; thus, the differences were, for the most part, relative, and not indicative of absolute levels of impairment in either group. Finally, because of the small sample and the small numbers living with someone other than a spouse, those living alone were compared to all of those living with others, without giving considerations to the variety of living situations encountered by those not living by themselves. As has been demonstrated by others who

Table 3. Regression Coefficients for Support/Resource and Health Relationships[a]

	Social Support				Community Resource		
	Quantity	Frequency	Quality	Satisfaction	Neighborhood Ties	Distance	Use
Physical Health							
Interviewer rating[b]	−.23	−.32**	−.38**	−.33**	−.18	−.02	−.30**
Self report[b]	−.29*	−.39**	−.38**	−.29*	[d]	[d]	−.27*
Mental health							
MMS[c]	.27*	.30**	.14	.13	[d]	−.08	[d]
CES-D[b]	−.29**	−.25*	−.15	[d]	−.18	[d]	−.25*
GHQ[b]	−.32**	−.32**	−.32**	−.57**	−.22	[d]	−.10
ABS[c]	.35**	.37**	.37**	.28*	.30**	−.12	.29**
Activities of daily living							
Interviewer rating[b]	−.38**	−.29*	−.35**	−.19	−.09	−.10	−.32**
Instrumental[b]	−.22	−.26*	−.31**	.14	−.19	.06	−.33**
Physical[b]	−.08	[d]	−.18	.07	−.10	.03	−.16

[a] For each equation, the health measure is the dependent variable and the support/resource variable is the independent variable, controlling for age by adjusting health score (see text)
[b] Higher score indicates more impairment
[c] Higher score indicates less impairment
[d] Interaction between support or resource variable and living arrangement in the prediction of health ($p < .05$)
* $p < .05$
** $p < .01$

have not considered the range of health and resource variables considered here, finer distinctions in living situations are also important.[7-9]

Despite these cautions, this initial investigation of community resident aged living alone indicates that those living alone are neither sicker nor more socially isolated than those living with others. Further research will be needed on other, larger populations to better understand the extent and meaning of the differences observed here.

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References

1. Soldo, B.J. and Lauriat, P. "Living Arrangements among the Elderly in the United States: A Log-linear Approach." *J Comparative Family Studies* 7(1976):351–66.

2. Gruenberg, E. "Community Conditions and Psychosis of the Elderly." *Am J Psychiatry* 110(1954):888–96.

3. Galle, O.R.; Gove, W.R.; and McPherson, J.M. "Population Density and Pathology: What Are the Relations for Man?" *Science* 176(1972):23–30.

4. Gove, W.R. and Hughes, M. "Reexamining the Ecological Fallacy: A Study in which Aggregate Data Are Critical in Investigating the Pathological Effects of Living Alone." *Social Forces* 58(1980):1157–77.

5. Hughes, M. and Gove, W. "Living Alone, Social Integration and Mental Health." *Am J Sociol* 87(1981):48–75.

6. Zubin, J.; Magaziner, J.; and Steinhauer, J. "The Metamorphosis of Schizophrenia: From Chronicity to Vulnerability." *Psychol Med* 13(1983):551–71.

7. Mindel, C.H. and Wright, R. "Differential Living Arrangements among the Elderly and Their Subjective Well-being." *Activities, Adaptation and Aging* 3(1982):25–34.

8. Mindel, C.H. and Wright, R. "Characteristics of the Elderly in Three Types of Living Arrangements." *Activities, Adaptation and Aging* 6(1985):323–45.

9. Lawton, M.P.; Moss, M.; and Kleban, M. "Marital Status, Living Arrangements and the Well-being of Older People." *Research on Aging* 4(1984):39–51.

10. Brown, G.W.; Bhrolchain, M.; and Harris, T. "Social Class and Psychiatric Disturbances among Women in an Urban Population." *Sociology* 9(1975):225–54.

11. Berkman, L. and Syme, L. "Social Networks, Host Resistance, and Mortality: A Nine-year Follow-up Study of Alameda County Residents." *Am J Epidemiol* 209(1979):186–204.

12. Blazer, D.G. "Social Support and Mortality in an Elderly Community Population." *Am J Epidemiol* 115(1982):684–94.

13. Broadhead, W.E.; Kaplan, B.H.; James, S.A. *et al.* "The Epidemiologic Evidence for a Relationship Between Social Support and Health." *Am J Epidemiol* 117(1983):521–37.

14. Kasl, S.V. and Rosenfield, S. "The Residential Environment and Its Impact on the Mental Health of the Aged." In J.E. Birren and R.B. Sloan (eds.), *Handbook of Mental Health and Aging.* Englewood Cliffs: Prentice Hall, 1980.

15. Duke University Center for the Study of Aging and Human Development. *Multidimensional Functional Assessment: The OARS Methodology.* Durham, NC: Duke University, 1978.

16. Folstein, M.F.; Folstein, S.E.; and McHugh, P.R. "'Mini-Mental State' A Practical Method for Grading the Cognitive State of Patients for the Clinician." *J Psychiatr Res* 12(1975):189–98.

17. Radloff, L. "The CES-D Scale: A Self-report Depression Scale for Research in the General Population." *Appl Psychol Measurement* 1(1977):385–401.

18. Bradburn, N.M. *The Structure of Psychological Well-being.* Chicago: University of Chicago Press, 1969.

19. Goldberg, D. and Hillier, V.F. "A Scaled Version of the General Health Questionnaire." *Psychological Med* 9(1979):139–45.

20. Kleinbaum, D.G. and Kupper, L.L. *Applied Regression Analysis and Other Multivariable Methods. North Scituate, MA: Duxbury Press, 1978.*

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Life-Care Institutions

THOMAS CRAWFORD MD

Life-care communities have much to offer. It is estimated that at least 3 percent of the population over 65 are now seeking such a "life-style" and that 20 to 30 percent could afford it, if available. It is no wonder that real estate developers, hotel corporations, restaurant and food service chains, hospitals, and nursing homes are becoming interested in the concept of life-care communities. Each of these organizations already furnishes at least one component of a life-care community.

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Housing for the elderly is not a new concept: many eighteenth and nineteenth century American houses are characterized by having an addition for the grandparents, and many Amish homes today have similar accommodations. We are familiar with the county- or state-operated "old folks home," prevalent in the first half of this century. Since 1950 the nationwide proliferation of nursing homes has become a major industry. Communities of retirement housing have developed from Florida to Arizona. However, as our elderly population increases both in absolute numbers and in age, these mechanisms are becoming inadequate. More diverse "life-styles," increased medical needs, higher socioeconomic expectations and capabilities, earlier retirement, smaller size of houses, and more families living in apartments and condominiums are forcing newer approaches to retirement housing.

No other civilization in human history has developed such a large geriatric population. While the number of people over age 55 doubled in this century, the population over age 65 is projected to double within the next generation. By the year 2000, more than 35 million Americans will be over 65 and 5 million will be over 85 years old. Currently 5,500 persons celebrate their sixty-fifth birthday every day, a total of 2 million annually.

There are 28 million Americans over 65, more than the entire population of Canada. In July 1983 the number of U.S. citizens over 65 exceeded those under 25 for the first time in history.

Housing and medical care for the elderly is the time bomb of the near future. Adding to this is a socioeconomic system that encourages and permits early retirement at age 55. There is little doubt that our current social security system has provided a safety net allowing millions of individuals to retire far earlier than did previous generations. In 1900 the average male spent 3 percent of his life in retirement; today he will spend over 20 percent of his life in retirement. Two-thirds of the work force will retire before age 65. Longevity has increased by 50 percent in this century, but retirement has increased 1,100 percent.

Besides aging, per se, there are at least three major concurrent sociological, architectural, and economic phenomena impinging on housing for the elderly. First, we have become a very mobile society with wide geographical dispersal of family members. Second, the physical constriction of the individual family housing unit simply does not leave a spare bedroom for Aunt Maude or Grandma. Third, in the majority of today's households, both spouses work. We have become a "Januslike society" looking at both latch-string children and elderly parents.

Innovative Solutions

Fortunately, these conditions also present opportunities for new concepts and programs: "Life-care retirement communities" and "retire at home" are but two of many new options. In 1981, Congress authorized the funding of certain home-care services, subject to federal approval. Thirty-four states have obtained waivers so that innovative programs can be initiated.

California spent over $300 million in 1985 for housekeeping, personal care, transportation, and allied health care for 100,000 aged and disabled individuals. There are now 59 day care centers for adults in California with an estimated current need of at least 1,000.

Although we usually think of Medicaid as an acute care program, 40 percent of the annual $34 billion Medicaid expenditures are for long-term care. Retire-at-home programs, similar to programs developed in Sweden in lieu of nursing homes, are being considered by various organizations. Huntington Memorial Hospital (Pasadena, California) has developed an extensive Senior Care Network that provides everything from home repair to medical care.

Friends Services for the Aging (Philadelphia, Pennsylvania), a consortium of five Quaker life-care facilities, and Brandeis University are initiating an innovative pilot project called Life Care at Home (LCAH). This project can serve a much larger geriatric community while allowing the elderly to stay in their own homes and still enjoy the services and security of a life-care contract. Many such programs will be fueled not only by need but also by new insurance programs for long-term care. Currently several major insurance companies are either issuing this coverage or considering it.

As one major carrier observed—we cannot ignore an insurance market that represents 35 million clients. Besides, as the elderly become more affluent, they have more assets to protect.

Life-care communities, also called continuing care retirement communities (CCRC), is a concept barely ten years old. Their initiation in the 1970s was marred by a few well-publicized failures such as Pacific Homes and the Presbyterian Housing Program of Indianapolis. However, there are now more than 600 facilities, more than 100 are located in the mid-Atlantic states. There are 20 operating or being planned in Maryland. Already a substantial segment of the health care economy, they seem poised for rapid growth.

The elderly population is not poverty stricken. True, there are numerous individuals who, due to catastrophic medical or economic events beyond their control, have been denied the security of the majority. But for the most part, the geriatric population is economically better off than any other senior generation in history and, perhaps, than younger generations today. For example, 75 percent of the geriatric population own their homes, and 85 percent of that group are mortgage free. This may represent as much as one trillion dollars in equity available for investment in retirement facilities. If only 10 percent of the population elects life-care options, as much as $100 billion could be made available as liquid assets.

Life-care facilities combine traditional and congregate housing with communal services and skilled nursing care when needed. The concept is not an old folks home, a nursing home, a retirement village, nor low-income housing. The objective is to promote independent, dignified living arrangements for as long as possible.

The packaging of life-care communities varies greatly. Physically they may be high-rises or housing units spread over hundreds of acres. They may be rental units, private homes, apartments, condominiums, or cooperatives. The most common density is approximately 20 housing units per acre and 150 to 300 housing units per facility.

Contracts

The distinguishing feature of life-care communities is a life-time contract between the facility and each resident defining the financial requirements and service obligations of each party. Most require an entrance fee that ranges from $10,000 to $100,000 or more. The average entrance fee nationwide in 1981 was $35,000. These fees may be treated as donations, investments, annuities, or noninterest-bearing security deposits. Depending on institutional policy, they may be consumed or refunded on a prorated schedule of 1 or 2 percent per month. Some states dictate how these funds are handled.

Entrance fees are being viewed by the Internal Revenue Service as below-market loans under section 7872 of the 1984 Tax Act. H.R. 2475, which was signed into law (P.L. 99-121) in October 1985, directed the IRS to exempt traditional CCRC entrance fees under $90,000 that are amortized over periods up to eight years. The most recent ruling exempts up to $250,000. Afterward, there is an all-inclusive monthly maintenance or rental fee ranging from one to three thousand dollars per month. The amount depends on the size of housing, promised or elected services, extent of medical services, health status, and a wide range of other factors. Since virtually all residents are 65 or older and thereby eligible for Medicare, supplemental insurance may or may not be required depending on health status.

A. M. Rose has defined traditional life-care communities as consisting of three basic components: (1) an apartment complex especially designed for the elderly to permit them to live independently: they have particular needs and distinct characteristics as advancing age brings physical impairments and mental changes; (2) dining facilities and an activity center including auditorium, arts-and-crafts room, lobby, small sitting areas, library, card room, game room, beauty-and-barber shop, country store, and other amenities; and (3) the care center encompassing at least three levels of medical care: skilled, intermediate, and assisted living. The community also should include a medical clinic where various specialists would be available to serve routine health needs.

M. Stroud Curran has described life-care communities as an amalgum of four businesses: it is a hotel offering apartment rentals, utilities, food and maid service; it is a health-care facility providing a skilled nursing center or custodial care; it is a social club providing meeting and activity rooms for a variety of functions frequently under the total or partial supervision of management; and it is an insurance underwriter offering services for the lifetime of its residents.

Residents of life-care communities enter as active individuals living in independent, private housing units. Initially, new facilities may admit nonparticipants directly to skilled nursing units to insure early occupancy. This is no longer permissible in Maryland. As life-care centers mature, approximately one skilled or domiciliary nursing bed will be needed for each four or five apartments. Approximately 80 to 85 percent of these nursing beds will be occupied by permanent residents who have moved from individual housing units because of failing health and chronic illness. The remaining 15 percent of the skilled nursing bed occupants will be transient individuals recovering from operations or

acute illnesses. Acute medical and surgical problems are referred to appropriate hospitals and specialists. Approximately 75 percent of the residents will be female. The average age of occupants of life-care rental units is about 82. Residents of retirement centers that provide condominiums or investment arrangements will average approximately ten years younger.

Longevity

The average resident will live approximately 12 years in a "rental" life-care facility. Some proponents believe that life-care residents live longer, but this is unproved and may be a function of the selection process. With a resident turnover of about 8 percent, life-care communities enjoy a fairly fixed population. Consequently, they may develop their own characteristics. This stability and shared amenities create an environment that resembles a large extended family.

Because residents do live so long, guaranteed fixed monthly fees are impossible. On the other hand, increasing fees, while holding millions in reserve, can be a thorny issue for management. However, few residents today are forced to leave because of finances. A recent study disclosed that 75 percent of life-care communities in the United States provide financial aid to residents who have suffered financial reverses. In most institutions, there is a voluntary endowment supported by residents through annual giving, bequests, and fundraising projects. This self-insurance of the "extended family" in some ways resembles Amish communities.

Residents are able to keep their mementos, antiques, and other personal treasures as they move from independent living to domiciliary to skilled nursing care. These benefits are almost immeasurable. Relieved of the burdens of home ownership such as cooking and mowing the grass, residents are free to travel or pursue life-long avocations. They also participate in dozens of committees and actively engage in all aspects of the life-care community. Nor are they denied opportunities to continue outside friendships and associations; some individuals even continue to work.

Great emphasis is put on the dining facilities and a wide range of menus. Overall, the chef may be more important than the physician. Most facilities have a minimum requirement of mandatory meals to insure proper nutrition and socialization of the residents. Mealtime also provides an opportunity for staff to evaluate the residents physical and psychosocial status on a daily basis. In this sense, all employees as well as residents are a part of the extended family. Employees in maintenance, housekeeping, dietetics, grounds keeping, security, as well as management and nursing are involved in overseeing and evaluating the well-being of all residents.

The social, emotional, psychological, biological, and physical aspects of the elderly are different than those of younger persons, and this should be reflected in the architectural and physical design of the facility. Parking areas should be spacious. Colors should be bright, and lighting should be adequate. Sheltered resting places should be appropriately placed. Electrical outlets should be higher, shelves lower, furniture higher and firmer, and stairs kept to a minimum. Appropriate and sufficient grab rails, handles instead of doorknobs, wide sidewalks, covered walkways, enclosed patios, and emergency call systems are a few of the many things that must be considered when designing housing for the elderly. Public areas should be available to exhibit resident hobbies and collections. Many residents have life-long collections ranging from stamps and paperweights to rare guns and furniture. These same areas should accommodate exhibitions of area artists and craftsmen on a rotational schedule. The elderly benefit from visual stimulation. They also prefer walking trails more than swimming pools.

There should be common areas that can be reserved for parties, family reunions, dinners, and anniversaries. Congregate housing reduces individual space for daily living, so space must be provided to fulfill the occasional need for larger private functions. In addition to the many services already mentioned, a life-care community should provide a coffee shop, private transportation service, message center, central internal communications, mail service, banking and accounting services, athletic and exercise facilities for both indoor and outdoor activities, combination country store and gift shop, and overnight accommodations for visiting friends and family.

As the need for acute care beds declines, the need for life-care beds will increase. This changing emphasis in health care will provide many opportunities for diverse health care professionals willing to expand their interests and horizons. The facilities and programs we plan for our elders should receive our utmost attention. Ultimately their solutions will be ours.

Bibliography

A Profile of Older Americans: 1985. Washington, DC. American Association of Retired Persons.

Curran, M.S. *Lifecare Industry 1983.* Philadelphia, PA: Laventhall and Horwath.

Goodman, E. "Janus Time." *Baltimore Sun,* May 21, 1985.

Rose, A.M. *Lifecare Industry 1983.* Philadelphia, PA: Laventhal and Horwath.

Wallack, S.S. and Moon, D. *The CCRC Without Walls.* American Association of Homes for the Aging Annual Meeting, Washington, DC, April 1986.

Winklevoss, H.E. and Powell, A.V. *Continuing Care Retirement Communities.* Homewood, IL: Richard D. Irwin, Inc., 1984.

The Transition Unit: The Bridge Between Acute and Long-Term Care

GEORGE TALER MD, JUDITH RYAN PhD, and HARRIET MANDELL LCSW

A model program developed by the Department of Family Medicine and the University of Maryland School of Medicine offers a unique opportunity for patients and their families faced with an early or difficult discharge plan.

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Economic and regulatory pressures brought to bear on hospitals over recent years have led to significant efforts to reduce the lengths of stay for acute care admissions. These constraints have had their most serious impact on the time allowed for convalescence, rehabilitation, and discharge planning. It is becoming increasingly clear these latter phases could well be managed outside the acute facility and may be considered within the realm of long-term care.

The course of most hospitalizations follows a similar pattern regardless of the cause for the admission. There is an acute phase comprised of stabilization, diagnosis, and initiation of therapy, and a subacute phase: therapeutic course, convalescence, rehabilitation, and discharge (Figure 1). Stabilization generally occurs in the emergency room, or if prolonged, in the intensive care unit. The diagnostic process begins concurrent to stabilization but continues over the subsequent days as further information is collated into a coherent pathologic explanation of the illness. As the diagnostic entities are identified, treatment is instituted, and the patient's response to therapy acts as confirmation of the diagnostic differential. At this point, there is often a "break in the action" as the therapeutic regimen runs its course and the patient is allowed to finish his/her hospitalization through to discharge.

Regulatory limits on lengths of stay have prompted health care providers to focus more narrowly on the principle diagnoses. Important secondary problems such as sensory impairments and immobility, polypharmacy, or social needs often are not fully addressed during a hospital stay. The issues of adequate recuperation, management of attendant conditions, and decisions of institutionalization versus in-home care are problems most often applicable to the aged patient.

To meet these challenges, The Robert Wood Johnson Foundation sponsored its Hospital Initiatives in Long-Term Care Program. The intent was to support the development of innovative systems of health care delivery for the aged, the most rapidly expanding segment of the hospital marketplace. Under the auspices of this program, the Transition Unit was established at the John L. Deaton Hospital and Medical Center, to act as a bridge between acute and long-term care.

As in acute care, an admission to the Transition Unit passes through certain phases (Figure 2). Subacute care encompasses the same set of services available on the general medical/surgical ward of an acute facility: intravenous fluids and medications, ostomy and catheter care, wound and tracheostomy management, and skilled nursing observation for unstable medical conditions. The medical and nursing resources are organized to assume responsibility for patient care just after the initiation of therapy or during the therapeutic course. However, unlike the acute hospital, a major emphasis is placed on convalescence and rehabilitation. Resources comparable to most rehabilitation facilities are available to our patients, and an intensive program of at least twice-daily therapy sessions is prescribed. Goals are individualized to meet those demands needed to assure a safe discharge to the patient's home.

Figure 1. Phases of an Acute Hospital Admission

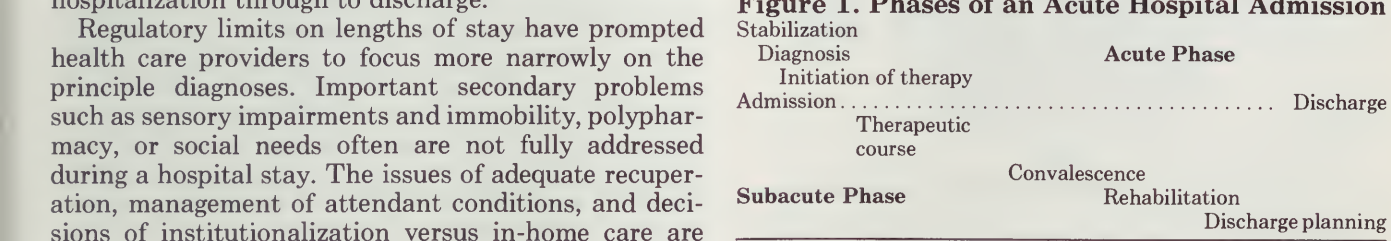
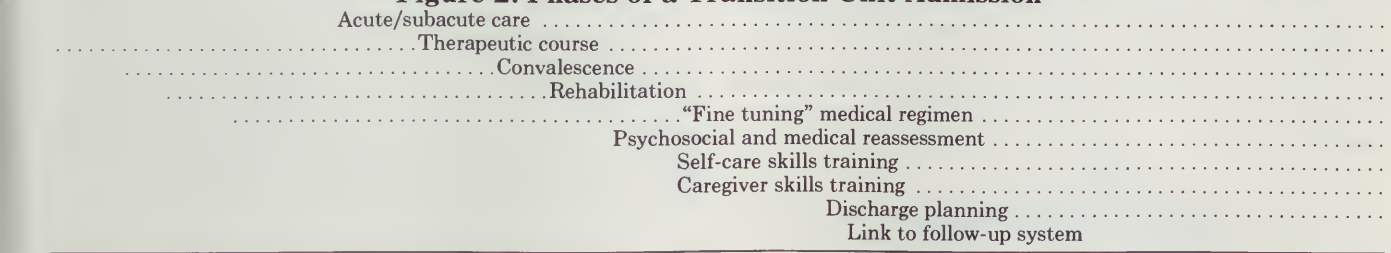


Figure 2. Phases of a Transition Unit Admission



Mechanics of the Transition Unit Process

Each patient referred to the program is evaluated by a nurse practitioner. Medical records are reviewed, patients interviewed and examined, and families (when involved) are consulted. The general medical condition and potential for recovery of the patients are considered along with their cognitive ability to participate in the program of relearning self-care skills. After each evaluation, the nurse practitioner contacts the referring person with the outcome of the examination. If the patient is selected, the option of the program is presented and the admission procedures are outlined. If the patient does not meet the criteria, the referring person is advised of the reasons, and alternate suggestions are made for disposition.

The Transition Unit is a ten-bed demonstration clinical and research program designed for the short-term rehabilitation of those patients with homes and the potential to return home within three months.* Patients and family must indicate a strong desire and level of motivation to return home and to avoid permanent institutionalization. Potential candidates for the program need to demonstrate a personal energy that makes that goal seem possible. Patients in early stages of dementia are eligible if they will not be living alone after discharge. A source of payment is also necessary for admission; Medicare, Medical Assistance, private insurance, or private pay are accepted. The Table outlines program eligibility criteria.

Table Eligibilities

Community placement presents a significant risk
Potential for returning home within three months
Patient and/or family motivated toward home care
Cognitive abilities sufficient to meet rehabilitation goals
Payment source
Willingness to accept primary care through the Transition Unit Interdisciplinary Team
Rehabilitation and medical needs at the **chronic** level of care

Upon admission to the transition unit, the patient is evaluated by a multiprofessional team: Medicine, Nursing, Social Work, Physical and Occupational Therapy, and Speech Therapy, when indicated. Specific measurable goals and a timetable are established. Patients and families are encouraged to identify the behaviors the patients need to be able to perform before they can safely go home.

The team also strives to "fine tune" the medical regimen and to counsel the patient and family "caregivers" in coping with the residual disabilities. Sensory impairments, deconditioning, and problems of immobility and functional abilities are addressed. Progress is monitored weekly by the interprofessional team throughout the patient's stay.

Promotion of self-care and independence in activities of daily living are common threads throughout the program. The discharge process and follow-up care programs are critical to the success of the Transition Unit. The discharge plan is carefully tailored to meet the patient's needs and the patient's family (or significant others') potential to provide support and care. The major thrust of the project, when appropriate, is to provide sufficient support to discharge the patient into the home environment.

When returning home seems feasible, the patient and the family caregivers are evaluated as to the family's dynamics and the role the patient plays, their financial capabilities, the physical safety of the home environment, and the depth and breadth of the patient's caregiving network. Of particular interest is the ability of the caregivers to manage the level of stress and the potential risk for abuse, neglect, or exploitation. During the course of the rehabilitation, the family is trained in home-care skills, and areas of continued need are identified that may require supplementation with community based services. This information, as well as potential discharge and follow-up care opportunities, is continually communicated to the patient and his or her family. Since "linkages" into the community have been established well ahead of time, the process generally occurs in an efficient and timely fashion.

To facilitate discharge, the Transition Unit provides links to a broad array of community resources, including in-home aides, skilled nursing and companion services, home health equipment, and specialized technological services. In addition, patients may choose longitudinal follow-up through the Harbor Health Care Center (HHCC). In this program, the multidisciplinary geriatric team of the HHCC becomes the patients' primary care provider and follows them after discharge, making regular home visits if required.

When the need for additional services after discharge is found, patients are referred to medical day care or out-patient rehabilitation centers. If returning home is no longer practical, alternative possibilities for provision of care in the community (such as foster homes) can be arranged. Should institutionalization become inevitable, financial counseling is offered and placement is sought that is acceptable to all parties.

* Due to the research and follow-up data collection aspects of this project, patients are limited to those living in the Baltimore area.

Discussion

The importance of a special inpatient evaluation for the appropriate placement of the chronically ill and aged is a relatively new concept in this country.[1] A few such centers have been established, predominantly at university and affiliated community hospitals[2–5] or Veterans Administration Hospitals.[6,7] Where studied, the benefits have been found not only in terms of improved self-care capabilities but also in significant redirection into community placements rather than long-term institutionalization.

Our program is unique as a national model in several ways. First, most such geriatric evaluation units have been in acute care hospitals. Thus they fall under the same regulations and pressures as those hospitals which limit either their effectiveness or their attractiveness. The Transition Unit, on the other hand, is housed in a chronic hospital. These facilities offer the same intensity of care as on the acute hospital ward but are licensed under the long-term care system. Therefore, "step-down care" services can be obtained at lower per diem costs and outside of prospective payment regulations.

Second, the Transition Unit is part of a larger system of long-term care that is comprehensive in scope and fully integrated with acute care, ambulatory, and homecare providers. Patients are screened through a preadmission process either during their hospitalization or from the community setting. This assures an appropriate level of care prior to transfer to the specialty hospital and serves to identify those patients most likely to benefit. Equally important is the link to an extensive after-care system that fosters continuity of care and longitudinal follow-up. Outcome data from the Transition Unit and follow-up programs assist in improved patient selection, more focused Transition Unit services, and better discharge planning.

Third, because admission to a chronic hospital is covered by Medicare and qualifies the patient for extended-care benefits, patients can be admitted directly to the Transition Unit from the community. The nature of the Transition Unit makes it an ideal location for hospitalization of patients who do not need surgery, intensive care unit observation, or sophisticated diagnostic testing. And, because length of stay is not subject to acute-care constraints, the patient may pass through all the appropriate phases of his or her hospitalization.

Many factors have led to increasing interest in the interface between acute and long-term care. Whereas a life-threatening illness usually is best managed in the hospital, the options for long-term care cover a wide range of possibilities. These decisions not only can produce a major restructuring of an individual's "lifestyle" but also can have significant financial implications for both the patient and the government. The importance of defining the appropriate setting for long-term care increases with the aging of our population.

References

1. Williams, T.F.; Hill, J.G.; Fairbanks, M.E.; and Knox, K.G. "Appropriate Placement of the Chronically Ill and Aged. *JAMA* (1973)226:1332–35.

2. Lefton, E.; Bonstelle, S.; and Frengley, J.D. "Success with an Inpatient Geriatric Unit: A Controlled Study of Outcome and Follow-up." *J Am Geriatr Soc* (1983)31:149–53.

3. Rubenstein, L.Z.; Rhee, L., and Kane, R.L. "The Role of Geriatric Assessment Units in Caring for the Elderly: An Analytical Review." *J Gerontol* (1982)37:513–21.

4. Applegate, W.B.; Akins, D.; Zwagg, R.V.; *et al.* "A Geriatric Rehabilitation and Assessment Unit in a Community Hospital. *J Am Geriatr Soc* (1983)31:206–10.

5. Balaban, D.J. *Chronic Care Study: A Randomized Longitudinal Study of Patients with Chronic Diseases Treated on a Special Care Unit in an Acute Care Hospital.* Final Report to the Robert Wood Johnson Foundation from Leonard Davis Institute of Health Economics, Philadelphia, PA, 1980.

6. Rubenstein, L.Z.; Wieland, D.; English, P.; *et al.* "The Sepulveda VA Geriatric Evaluation Unit: Data on 4-year Outcomes and Predictors of Improved Outcomes. *J Am Geriatr Soc* (1984)32:503–112.

7. Rubenstein, L.Z.; Josephson, K.R.; Wieland, G.D.; *et al.* "Effectiveness of a Geriatric Evaluation Unit: A Randomized Clinical Trial." *N Engl J Med* (1984)311:1664–70.

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Alcohol and the Elderly

ARTHUR MacNEILL HORTON, Jr., EdD

Best estimates suggest that 10 to 20 percent of the elderly population have alcohol abuse problems. Clinical evidence suggests two subtypes of elderly alcoholics: some have a lifelong pattern of substance abuse, but another group begins to abuse alcohol only late in life and in response to age-related stresses. While much additional research is needed on the treatment of elderly alcoholics, some findings suggest that groups made up of elderly individuals may be more successful in treatment than are groups including both young and old alcoholics.

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"Come grow old along with me, the best is yet to be" (Robert Browning). The line of poetry suggests old age will be a pleasurable experience. Will it? It depends. Consider the case of a subpopulation of the aged for whom the above line of poetry appears particularly inappropriate. These are elderly individuals who are afflicted with alcoholism.

Epidemiology

Aging The fact that aging will be *the* major health problem of the next half century is well known.[1] The explosive growth rate of the aging population in the United States can be appreciated only if one recalls that in 1920 only 5 percent of the population was above age 65, while in 1980, the figure had doubled to 10 percent of the population having lived more than 65 years. More disturbing are projections that in the year 2000, 20 percent of the US population will be above age 65, over 40 million individuals.

Alcoholism Current estimates are that 13 million Americans of all ages abuse or are addicted to alcohol. As is well known, alcohol has been implicated in many health problems such as heart disease, hepatitis, cirrhosis of the liver, and in cancers of the mouth, esophagus, larynx, liver and other organs. Similarly, the economic costs of alcoholism are well known. When lost productivity at work is added to property damage and health care bills, the associated costs of alcoholism are estimated to exceed $200 billion.

Less well known are the mental health effects of alcoholism. Startling data regarding the prevalence of alcoholism were published in the October 1984 issue of *Archives of General Psychiatry*. While many were shocked by data suggesting that 19 percent of the US population has mental disorders, even more were amazed that alcoholism was the most common diagnosis for males from 18 to 64 and the third most common disorder for those over age 65.

Aging Alcoholics

The best available data suggest prevalence of alcoholics estimates from 10 percent to 20 percent. Differing prevalence estimates often appear to co-vary with treatment settings.[2] For example, reviews of nursing home populations often demonstrate problem rates of about 20 percent.[3] By contrast, surveys of general medical wards are more likely to show rates of elderly alcoholics range of 15 to 20 percent.[4,5] Community dwelling samples show prevalence rates of approximately 10 percent.[6,7] Thus there appears to be a continuum of higher prevalence rates in the institutionalized population and lower rates in ambulatory population; nonetheless *all* elderly populations had significant rates of alcoholism.

A wealth of data suggest there are reliable subtypes of aging alcoholics.[8,9] Two fairly distinct subgroups of elderly alcoholics have been identified[10] that can be differentiated in terms of age of onset.

Early onset The first subgroup of elderly alcoholics are those who began drinking at an early age. They represent two-thirds of the aged alcoholic group. Typically this type began alcohol abuse before or during their early twenties.

Late onset By contrast, the second subgroup of elderly alcoholics, who began to drink late in life, represents the remaining third of the aged alcoholic group. How late? Generally their alcohol abuse began during or after their mid-fifties.[10] Although many persons are identified as alcoholics between the ages of 20 to 50, the point is that the onset of heavy drinking is early or late. Persons who begin drinking at age 20 can often, due to their physiological vigor, not show the social, emotional, occupational, and neuropsychological effects of alcoholism for 20 to 30 years. Individuals over age 50, due to the effect of age on the body, are more likely to show less delay between the onset of heavy drinking and the beginning of problems related to drinking.

A number of factors appear to characterize each subgroup other than the simple demographic variable of age. For example, early onset elderly alcoholics are more likely to demonstrate a lifelong personality pattern of addiction.[10] By contrast, the late-onset alcoholic is thought to drink in response to the stresses of aging. The late-onset alcoholic, therefore, is seen to drink in response to external pressures rather than personality

or internal factors. Late-onset alcoholics are likely to drink less alcohol on a quantative basis but more likely to drink daily.

Stresses

The stresses of aging may have promoted drinking among late-onset elderly alcoholics. Consider loneliness and bereavement, for instance. As one grows older, social opportunities are often less common. Children grow up and have their own interests. Neighbors move away and coworkers take different jobs. Spouses may become ill and die. Similarly, the elderly often have poor health. It is very clear that as one grows older the senses become less powerful. One gerontologist suggested that the senses of vision, hearing, and tactile perception all decline with increasing age.[1] Moreover, the incidence of debilitating medical illnesses such as stroke, cancer, and trauma are positively related to age.

Financial status is likely to diminish with increasing age. With retirement, most pension plans provide only a fraction of one's former income. At the same time, expenses often remain relatively constant or increase with inflation. The result is "golden years" on very little "silver" much less "gold."

Treating the Elderly Alcoholic

The primary consideration in the initiation of treatment of elderly alcoholics, identification of these persons, can be a problem. While the *Diagnostic and Statistical Manual* (DSM III) of the American Psychiatric Association (1980) provides a definition of alcohol abuse, there are difficulties in applying this definition to the elderly alcoholic of the late-onset type. Psychological addiction, as opposed to physiological addiction, is hard to quantify. In younger alcoholics, work performance and family relations provide standards of measurement. Elderly late-onset alcoholics are often retired and live alone. Moreover, the difficulty in identifying such elderly alcoholics is increased by two factors: (1) They hide their drinking from others. As is well known, repression and denial are cardinal symptoms of addiction problems. Therefore, if the patient's self-report is unreliable and there is no opportunity for observation, detection of alcohol abuse problems are difficult. (2) The problem is compounded because elderly alcoholics are more likely to drink daily than to go on binges and their systems require less alcohol for toxic effects to occur.

What setting is most appropriate for initiating treatment with elderly alcoholics? As might be expected with any patient population that combines two or more traditional classifications, each has advanced arguments for the particular suitability of its setting for treating aging alcoholics.

The rationale of the alcoholism treatment community suggests that elderly alcoholics be treated in the same settings as younger alcoholics. They can document considerable expertise and experience in diagnosing and treating alcoholics. Others avow that alcoholism treatment settings are biased toward younger clients who can be returned to gainful employment. A special version of the YAVIs syndrome[1] (that is, preferring young, attractive, verbal, and intelligent patients) is understandable as some elderly patients may be unattractive, nonverbal, and demented. In truth, negative attitudes toward the elderly are common in nonaging-focused treatment settings and could be expected in alcoholism treatment settings.

By contrast, facilities for the elderly have a different set of strengths and weaknesses: they have a wealth of expertise and experience in treating elderly individuals. On the other hand, the alcoholic population is notoriously difficult to treat, and elderly treatment facilities lack this special expertise. Also, the facilities for the elderly may have negative attitudes toward the alcoholic.

Perhaps the only way to distinguish clearly which setting is superior for aging alcoholics would be to follow patients assigned to both settings and arrange an empirical test.

What resources are available for the elderly alcoholic? With little change, the same modalities available for the younger alcoholic can be used. These include Alcoholics Anonymous, the preeminent peer group support system, and its variations for family members. Similarly, individual and group counseling and psychotherapy, either insight oriented or behavioral, could be recommended. Within the category of group socialization, some distinctions could be made between younger and older alcoholics. With the elderly, there is a tradition of using day care and life-review methods.[11] These modalities might be extended for the elderly alcoholic population.

Which treatment modality is best to prevent substance abuse and to promote quality of life? The question naturally arises after enumeration of multiple treatment options for the elderly alcoholic. To deal with this question some reference should be made to the psychotherapy literature in general.

The following figure captures the essence of current knowledge regarding psychotherapy:

$$X > O \text{ but } X = Y = Z$$

Where X = psychotherapy 1
Where Y = psychotherapy 2
Where Z = psychotherapy 3

Put another way, there is agreement within the literature that psychotherapy, broadly considered, has a beneficial effect, but it is not possible to say that one particular brand of psycotherapy is better than another.

It is sad, but true, that this state of affairs adequately mirrors the state of the art in understanding what is best for aging alcoholics. About the only specific finding is a suggestion that elderly alcoholics may do better in groups of their age peers than in more age-heterogeneous groups.

Research Direction

Given the lack of firm research support for many clinical care decisions, it is evident that research on aging alcoholics is urgently needed. Among other suggestions, the following are offered but fail to exhaust the range of possibilities.

A number of studies could be done on the effectiveness of traditional modes of therapy for the aging alcoholic (that is, AA, Group, Behavior Therapy, etc.)

A second area is examination of the role of alcohol in the etiology of dementia. There is a wealth of data on the neuropsychological effects of alcoholism.[12] Dementia is not a new disease, and it is age related (20 percent prevalence in persons over age 80). All available demographic information[1] indicates that the proportion of the population over age 65 will increase dramatically in the coming decades. As this group grows, the relationship with alcoholism is likely to be increasingly studied.[13]

Another research area of particular interest is the relationship of alcohol to major mental health disorders of later life, such as depression, suicide, anxiety, and paranoia. Since the proportion of the population within the age group classified as elderly will increase, the number of persons with these problems who are elderly alcoholics reasonably could be expected to increase.

References

1. Horton, A.M., Jr. "Introduction to the Psychotherapy of Aging." In A.M. Horton, Jr. (ed.), *Mental Health Interventions for the Aging.* New York: Praeger, 1982.
2. Schuket, M.A. and Pastor, P.A. "The Elderly is a Unique Population: Alcoholics." *Alcoholism: Clin Exp Res* 2(1978):31–38.
3. Graux, P. "Alcoholism of the Elderly." *Rev Alcoholism* 15(1969):61–63.
4. McCusker, J.; Cherubin, C.F.; and Zimburg, S. "Prevalence of Alcoholism in General Municipal Hospital Population." *NY State J Med* 71(1971):751–54.
5. Barchha, R.; Steward, M.D.; and Guze, S. "The Prevalence of Alcoholism among General Hospital Ward Staff." *Am J Psychiatry* 1(1968):681–84.
6. Glatt, M.M. "Drinking Habits of English Alcoholics." *Acta Psychiatr Scand* 37(1961):88–113.
7. Rosin, A.J. and Glatt, M.M. "Alcohol Excess in the Elderly." *Q J Stud Alcohol* 32(1968):125–31.
8. Simon, A.; Epstein, L.J. and Reynolds, L. "Alcoholism in the Geriatrically Mentally Ill." *Geriatrics* 23(1968):125–31.
9. Gaitz, C.M. and Baer, P.E. "Characteristics of Elderly Patients with Alcoholism." *Arch Gen Psychiatry* 24(1971):327–78.
10. Zimberg, S. "Diagnosis and Treatment of the Elderly Alcoholic." *Alcoholism: Clin Exp Res* 2(1978):17–29.
11. Karpf, R.J. "Individual Psychotherapy with the Elderly." A.M. Horton, Jr. (ed.), *Mental Health Interventions for the Aging.* New York: Praeger, 1982.
12. Ryan, C. and Butters, N. "Neuropsychology of Alcoholism." In D. Wedding; A.M. Horton, Jr.; J.D. Webster (eds.), *The Neuropsychology Handbook: Clinical and Behavioral Aspects.* New York: Springer, 1986.
13. Butters, N. "Alcohol Korsakoff's Syndrome 1: Some Unresolved Issues Concerning Etiology Neuropscyhology, and Cognitive Deficits." *J Clin Exper Neuropsychol* 7(1985):181–210.

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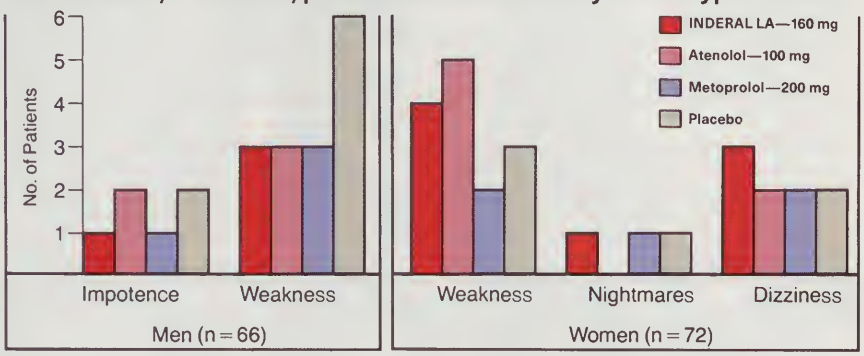
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Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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REFERENCE:

1. Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321–1323.

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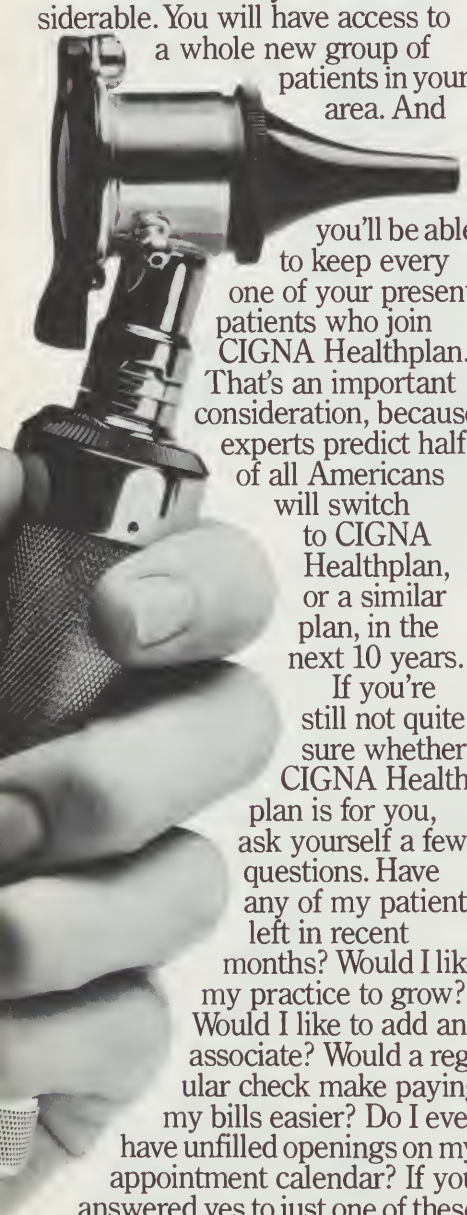
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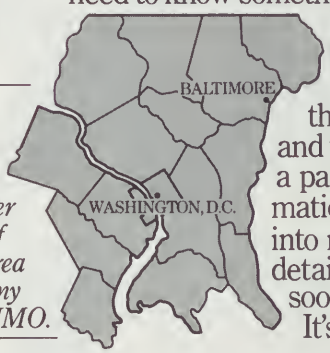
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Depression and Suspiciousness in the Elderly

PETER V. RABINS MD

Depression and paranoia are symptoms that often respond to appropriate treatment. Proper diagnosis and a careful medical and psychiatric evaluation form the basis for initiating treatment.

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Depression is a common complaint among the elderly. Community surveys suggest that more than 20 percent of patients report depressive symptoms, and studies in physicians' offices report even higher prevalence rates. Symptoms of suspiciousness or paranoia are less common. In one community survey 4 percent of the elderly living in the community were found to have what was termed "generalized persecutory ideation." This article discusses clinical recognition, diagnosis, and management of these symptoms. Depression and paranoia are approached as symptoms, that is, as complaints or reports from patients or their families about experiences the patient is having. As with most symptoms, they can have many etiologies. The first step for a clinician after recognizing the presence of depression or suspiciousness is to try to make a syndromic diagnosis and carry out whatever further evaluation is appropriate; the syndromic diagnosis should then suggest treatment.

Types of Depression

Adjustment disorder with depressed mood: this sad mood follows a recognizable stress and causes significant interpersonal and social distress. Other terms used to describe this state include demoralization and reactive depression. Sleep and appetite may be disturbed transiently, but weight loss is generally not significant. The examiner can appreciate how the patient would have become depressed in view of the precipitating circumstances, but for the depression to be a diagnosable symptom the mood itself should be a problem. This distinguishes an adjustment disorder from bereavement in which depressive symptoms are common and distressing but in themselves are usually not problematic or disabling.

Major depression: the mood is pervasively and persistently depressed. Other terms used to identify this condition are endogenous depression, unipolar depression, endogenomorphic depression, or vital depression. While a precipitant may be present, the depression has taken on a life of its own. That is, the sad mood has persisted for at least several weeks and is relatively unresponsive to environmental stimuli. A cardinal feature of this type of depression is that the patient's sense of self has changed. Patients often report "I don't feel myself" or "I feel I'm a changed person." This change in self-attitude should suggest to the clinician that a significant depression is present.

Major depression generally is accompanied by so-called "vegetative" or "vital" symptoms. Appetite often is diminished, and weight loss can be significant. Sleep disturbance is common; awakening earlier than usual is highly suggestive of this diagnosis but difficulty falling asleep can be a symptom as well. Patients often believe they have no energy, cannot move, or cannot think with their accustomed clarity.

Some patients develop delusions congruent with a depressed mood. They may blame themselves for past or present misdeeds, think they deserve to be punished, become hopeless about recovery, or feel worthless. Delusions of poverty or ill health ("I have no intestines," "I have no blood") may be present. The latter would be recognized by the physician as hypochondriacal ideas. Any patient with such ideas must be evaluated for depression.

Dysthymic disorder: is chronic depressive symptoms lasting for years and often tied with personality or character pathology. These disorders previously were known as neurotic depressions. While chronic unhappiness is present, the patient has periods when his/her mood is better; sometimes fluctuations occur within a day. There is generally no consistent pattern to this fluctuation, whereas in major depression there may be diurnal variation of mood. In the latter the depression is most severe in the morning (or less commonly, the evening), and this pattern is the same day after day. Often patients with dysthymic disorder have had lifelong interpersonal social problems.

Recognition and Diagnosis

Some patients spontaneously report a depressed mood to the clinician, but others do not. Questions about mood should be part of any complete medical examination. However, patients often resist using the word "depression" to describe how they feel even when they appear sad. They frequently will use other words or terms such as "I feel terrible." They may deny feeling sad but identify a specific physical discomfort. The recognition of "change in self-attitude" identified above under major depression is most important. Whatever the word used, patients often can recognize that they are in some ways changed and not feeling like themselves.

Depression may present with complaints of concentration difficulties or memory disturbance. Thus all patients who present with such complaints should be assessed carefully to determine whether depressive symptoms are present.

Patients with symptoms of sadness or depression should be asked about suicide. The presence of suicidal thoughts is an indication for a careful assessment and probable referral to a psychiatric specialist. Suicide rates are highest among the elderly.

A careful family history and past psychiatric history should be collected from all patients being evaluated for depression. Major depression is often a recurrent disorder, and episodes of depression (either treated or untreated) earlier in life strongly support this diagnosis. Lifelong unhappiness suggests a neurotic disorder. Family history of depression, mania, or alcoholism also increases the likelihood of a major depression being present.

Etiology

Adjustment disorders with depressed mood and bereavement, by definition, have as their etiology a precipitating stress or stresses. Individuals who develop reactive depressions may be unique in having other predisposing factors or may be under a great deal of stress. For the most part, the etiology of major depression is unknown. In a substantial number of cases a familial (and probably genetic) etiology is suggested. However, up to one-third of depressions start in late life and present in persons with no family or previous personal history of depression. Some of these individuals are likely to have identifiable physiologic disorders as etiologies. For example, work at Johns Hopkins by Robert Robinson and his group has demonstrated that a significant proportion of patients suffering stroke develop a depression that has the symptoms, course, and treatment response of idiopathic major depression.

A number of drugs can precipitate a major depression. Among these are the beta blockers and other antihypertensive drugs such as reserpine or methyldopa. Endocrinologic disorders such as hypothyroidism and Cushing's disease occasionally cause a depressive syndrome.

Treatment

Treatment depends on the syndromic diagnosis, presumed etiology (if one can be identified), and the severity of the disturbance. Controversy exists as to whether psychotherapy or drug therapy alone are better for minor depressions, but all authorities agree that major depression with prominent changes in self-perception, with delusions, or with physiologic abnormalities requires somatic therapy.

An in-depth discussion of psychotherapy or drug treatment regimens is beyond the purpose of this article. Psychotherapy and drug therapy are skills developed through training. Their inappropriate use in unskilled hands can have negative effects; practitioners should gain expertise in their use.

Referral to a Psychiatrist

Some practitioners refer to all patients with depressive symptoms to a specialist for treatment, while others initiate psychotherapy, drug therapy, or a combination of both. Referral to a psychiatrist should be considered for patients who have not responded to therapy, patients who have suicidal thoughts, and patients who have complex coexisting physical and psychiatric symptoms. The depressed elderly often suffer significant physical illness, and the care of such patients requires skilled medical and psychiatric care.

Electroconvulsive therapy (ECT) has an important role to play in the treatment of the elderly. ECT is the most efficacious treatment of depression and often is safer than drug therapy for the severely depressed patient. Delusional patients particularly respond better to ECT than to drug treatment. Referral to a specialist is necessary when ECT is indicated.

Suspiciousness or Paranoia

The symptom of suspiciousness is much less common than is depression but also can indicate a number of situations or conditions. To qualify as a delusion, a suspicious or paranoid idea should be preoccupying, idiosyncratic (unique to that individual), false, and unchanging. Suspicious ideas are often plausible. In fact, a suspicious complaint from a patient may be valid. Again, suspiciousness is a symptom, not a diagnosis.

If the idea is false, it could be a symptom of depression, a schizophrenialike illness, medication toxicity, delirium, or dementia. Thus the identification of suspiciousness or paranoia should lead the clinician to perform a careful mental status and physical examination to determine which syndrome can best explain the presence of the symptoms. The identification of the syndrome will then suggest the specific treatment.

An important question to consider in addressing a patient with an isolated paranoid symptom is whether the symptom is causing a problem. The mildly suspicious person with dementia, for example, is often best treated by environmental and social manipulations rather than drug therapy. Depressed patients with paranoia should be treated for depression, and neuroleptic drugs added judiciously when the symptom is prominent, disabling, or not responding to antidepressants.

Alzheimer's Disease and Related Disorders: A Growing Challenge in Maryland

WILLIAM REICHEL MD, MICHAEL S. FRANCH PhD, and EDMUND BEACHAM MD

The Governor's Task Force on Alzheimer's Disease and Related Disorders studied the extent of dementing illness in Maryland and the resources that were available to caregiver and physician. It found significant gaps in diagnostic services, education and training, home-health services, and support for family caregivers. The Task Force presented its findings and recommendations in the *Maryland Report on Alzheimer's Disease and Related Disorders* (1985). The 1986 Maryland General Assembly addressed some of these concerns, but much remains to be done.

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Caring for the dementia victim is one of the most difficult aspects of geriatric practice. It calls for medical knowledge, compassion, an awareness of the strains such care puts on the family system, and information about the formal and informal support network so crucial to care-giving families. In 1984 Governor Hughes convened the 16-member Governor's Task Force on Alzheimer's Disease and Related Disorders to help legislators and health planners prepare for the increasing personal and social costs of Alzheimer's disease and related disorders (ADRD) as the population ages. The panel studied the extent of dementing illness in Maryland and the resources available to "caregiver" and physician. On June 30, 1985 it issued its report, the result of 18 months' investigation, which made numerous recommendations regarding services to dementia victims and their caregivers, education and training for health care professionals, financial relief for afflicted families, and statewide data collection. The Maryland General Assembly, which convened in January 1986, enacted several of these measures into law during its 90-day session. Other Task Force recommendations have moved into public policy via executive orders. Some recommendations were accomplished through the Governor's budget proposals; others are in the hands of a coordinating council, which is to further study several Task Force recommendations.

This article focuses on the findings of the Task Force. While it draws from the *Maryland Report on Alzheimer's Disease and Related Disorders*, it is not a condensed version. The *Maryland Report* explains its information gathering technique. Here it is sufficient to state that the Task Force surveyed physicians, families, nursing homes, medical schools, law enforcement agencies, hospitals, adult day care centers, paramedic training programs, home health care agencies, research investigators, insurance companies—16 different categories in all. The Task Force held nine public hearings from the Eastern Shore to the mountains of western Maryland, and received letters and statements from caregivers and health care professionals throughout the state.

The Task Force found that ADRD victims and their caregivers faced a bewildering variety of emotional, financial, and legal problems. Some necessary services did not exist in their counties, or services existed but caregivers did not know about them. This assessment of resources went to the heart of the public and legislative interest in dementia. The delineation of these gaps in service, education and training, data, and finanical support was the core of the *Maryland Report*

Definition of Dementia

Dementia is an organic syndrome evidenced by a decline of memory and other intellectual functions in comparison with the individual's previous level of functioning. It is determined by the history of decline in performance and by abnormalities noted from clinical examination and neuropsychological tests.

It is important to differentiate dementia from other conditions or disturbances that resemble dementia. Acute confusional states (delirium) and emotional disorders may mimic dementia. Other conditions such as hearing loss may also resemble dementia. All of these disturbances do not fall under the diagnosis of dementia as defined above.

The most common form of dementia (approximately 60% of cases of organic dementia in the elderly) is Alzheimer's disease. The second most common cause, multi-infarct (or arteriosclerotic) dementia, comprises approximately 25% of the cases of dementia in the elderly. Some patients show clinical and pathological features of both Alzheimer's disease and multi-infarct dementia. (*The Maryland Report on Alzheimer's Disease and Related Disorders*, 1985.)

on Alzheimer's Disease and Related Disorders (1985).

The Task Force initially focused on obtaining statistical information, but rapidly discovered the value of the abundant anecdotal material it collected. Indeed, some of the deepest insights came from comments on questionnaires by families and in letters to the Task Force. Many comments of family caregivers, physicians, social workers, and others were incorporated into the report, not simply to illustrate statistics but because nothing so well conveyed the devastating emotional impact of dementing illness. These comments were findings in their own right and were considered by the Task Force in making its recommendations. Our quotations are taken from the *Maryland Report* and from unpublished comments in the Task Force files.

Demography

Because dementing illnesses are difficult to diagnose and because they usually are not reported as a primary cause of death, the epidemiologic evidence is not as complete as could be desired. It is clear, however, that the prevalence of Alzheimer's disease and such related disorders as multi-infarct dementia are strongly correlated with age. Given the solidly based projections for the increase in Maryland's population age 65 and over in the next few years, even conservative estimates on the extent of ADRD produce alarming figures. Thus, the Task Force's "rough low estimate" of 5 percent for those 400,000 Marylanders over 65 years and 20 percent for those over 85 years produced these estimates and projections:

- ADRD afflicts 20,000 Marylanders age 65 and over.
- By 1990 (only four years from this writing) the number will jump to 26,000 cases (over 17,000 of them in the over-85 age group).
- By the year 2000, ADRD will afflict at least 30,000 Marylanders. Of these, 20,000 will be institutionalized (mostly in nursing homes) and 10,000 will be cared for in the community.

The Burden of Care

It is impossible to estimate the misery these 20,000 cases represent. In addition to the ADRD victim, the burden afflicts their aged spouses, middle-aged children, and even grandchildren. Caregivers reported feelings of isolation, desperation, and of being overwhelmed. The following quote, one of many similar statements made to the Task Force, gives a sense of caregiver desperation:

> It's a lonely life. Doctors say, "I can't help, so don't bother to come back." Friends stop coming. Even relatives don't want to see us.... When I get tired, which is often, I contemplate suicide. It is the only way out. The disease is interminable.... I don't want to be alone.

What do these caregivers need? Their plight can be described as a public health problem in its own right, and since it is often only caregiver stamina and mental health that stands between an ADRD patient and the nursing home, the question takes on broader implications. The Task Force found that in meeting the needs of ADRD caregivers and their loved ones, the health care delivery system also would be meeting the needs of the frail elderly (and those requiring long-term care) in general. Answering that question also depends, in part, on answering the subsidiary question: what do physicians require in order to help them?

The *Maryland Report* expressed these needs as gaps to be filled. There were gaps in services, knowledge and training, and financial assistance.

Education and Training Gaps

A major caregiver complaint was that they did not know what they needed to know and that many individuals in the range of health-care professionals they encountered in their quest did not have the knowledge that they needed. Indeed, the report concluded, after surveying medical schools, nursing schools, etc., that "all the helping professionals suffer inadequate preparation for dealing with this burgeoning problem.... Helping professionals are more likely than in the past to learn about ADRD, but in some fields and some institutions, provision of such knowledge is still spotty."

Many health-care professionals and family caregivers lack essential information about dementing illnesses and the care of dementia victims. Respondents explicitly told the Task Force that they lacked information. Occasional "respondents" returned completely blank questionnaires, pleading they lacked the knowledge with which to reply to the queries. Many respondents failed to respond to portions of the questionnaire.

The Task Force report concluded

> there are serious gaps in the education and training of those called upon professionally to help ADRD victims and their families.... Whether trained years ago, before the current level of awareness of ADRD, or even currently ... medical and health-related providers predominantly are insufficiently trained to understand and cope with the nature and extent of dementing illnesses.

The Task Force judged patient care and management to be particularly spotty. This judgment, which may at first seem harsh, was based on surveys of educational institutions (including medical schools), caregiver responses, and the evaluation of physicians themselves. As an internist wrote on his survey form,

> Since the public still has great respect for authority of the medical profession, we need an informed knowledgeable and sympathetic physician who can give helpful and accurate information about ADRD. I don't think this is [the] case now. Therefore education of [the] profession has high priority.

Service Gaps

Diagnostic services While the Task Force had no way of determining whether most physicians do adequate diagnostic workups or (as one physician charged) "still do the 'senile write-off,'" it is clear that many caregivers had great difficulty in obtaining an appropriate evaluation. Some of those who experienced difficulties undoubtedly did so years ago, when both physician and public awareness of ADRD was low. Today, with increased lay and professional awareness of dementing illnesses, the danger may be in the other direction. Just one quotation illustrates the flavor of some of the comments:

> I gave our family physician some written notes on my mother. He diagnosed her as being in the beginning stages of Alzheimer's disease. That is it. He did not talk to her—just told me. He never suggested referring her to someone else for aid.

Even with today's high-technology medicine ADRD remain difficult to diagnose. Further, while highly sophisticated diagnostic services may be found in the state's metropolitan areas, residents of the state's rural areas find traveling to the metropolitan centers difficult because of patient resistance. Although the majority of the physicians who responded to the Task Force survey reported that diagnostic services were adequate, a majority of the caregivers reported them inadequate.

Ongoing physician support A physician who numbers caregiving families among his or her patients very likely must deal with a highly stressed family. This should be of concern even if only the person with ADRD is the patient, for the well-being of the caregiver will enhance the well-being of the patient. Some caregiver respondents were angry at unhelpful or uncaring physicians. Others highly praised their medical care. The wife of a victim reported that "when the diagnosis was made the doctor laid all the cards on the table to the whole family including the patient. His predictions have followed through. I appreciate this approach." But another wife complained that she was simply told "to read *The 36-Hour Day* and to go home and get my life in order and to attend the ADRD support group meetings." The advice was correct, but obviously did not meet the need of a person about to undergo one of the greatest health crises in her life.

Physicians are not expected to be authorities about community resources. Yet, the health of the dementia patient and his or her family may depend on unimpeded access to home health care, adult day care, and respite care. As in the examples above, many confused and bewildered families look to the physician for direction. From the evidence of caregivers and health-care professionals (including physicians), the physician often is unable to even point them in the right direction. As a nursing home official wrote, "Physicians may address problems of the Alzheimer patient, but they are not familiar with support services and networking that will meet the psychosocial needs of the patient and his family."

This is not just the estimation of others. Physicians who wrote to the Task Force acknowledged they were unfamiliar with community resources. When asked to comment on the availability or adequacy of a list of resources that might be in their community, some physician respondents to Task Force surveys had to answer that they did not know; others simply did not reply. It is interesting that while 80 percent of caregivers deemed home health services inadequate, half the physicians responding thought that home health services were adequate.

Information and referral service Physicians, however, were not the only professional group the Task Force found lacking in meeting the needs of caregivers for information and referral. Nurses, emergency medical technicians, firefighters, and law enforcement officials reported that they needed more information about where to turn and what to do when confronted with a dementia victim.

Further training can correct some gaps, but the problem goes beyond that. Health care professionals and family caregivers portrayed the system as complex, confusing, and frequently irrational. Many caregivers told sad stories of mistaken assumptions, gravely erroneous information, and lack of help in quarters where it was reasonably expected. A respondent to a Task Force survey who was a health-care professional reported that "even as an educated person who is part of the health care system, I found it difficult to obtain help for my father. Someone not well versed in our system might have found it impossible." This was one of the clearest messages that caregivers presented the Task Force. Attempting to navigate through the legal and financial system without expert aid can lead to disaster. A witness at a Task Force hearing testified she spent money set aside for her daughter's college education on her mother's care—probably unnecessarily. Many others told of difficulties that might have been avoided had they had timely and accurate legal, financial, and medical information.

Home health care Most ADRD victims go through a long period of care at home before nursing home placement. Most families prefer to care for them as long as possible, and since most nursing home dementia pa-

tients will be cared for at public expense, it would seem to be good public policy to assist the family caregivers in their task. Yet unless a dementia victim develops an acute health problem (such as a broken leg), he/she is neither eligible for the services of county public health nurses or home health care aides, nor will Medicare pay for these services. A supervising nurse with responsibility for home health care testified that as soon as the need for skilled nursing ends, home health aides must be removed from the home, even though the need for custodial care involves the family in one of their greatest trials.

A Caroline County family practitioner castigated the Task Force for not including physician home services on one of its survey forms:

> Physician home services ... are so grossly underreimbursed that it is a crime .... ADRD is basically an outpatient, i.e., nonhospital problem except for diagnosis. One of the best and most economical tools in managing such patients would be home calls by physicians—which none can afford to make under current reimbursement schedules.

Adult day care Caregivers considered this service crucial. It provides respite for home-bound caregivers, allows others to continue working, and offers substantial benefits for dementia victims, including reality orientation, socialization, and health monitoring. Unfortunately, not all counties have adult day care centers (they existed in only 11 of Maryland's 24 jurisdictions when the Task Force issued its report), and some families are unable to afford them; for those who qualify, there are medical assistance funds and sliding-scale Preventive Medicine Administration Grants, but there are only a limited number of slots allocated for these subsidies. For the private payee, adult day care can be a very expensive proposition, with charges ranging up to $45 *per day*. Further, some centers are reluctant to admit ADRD victims, who sometimes are difficult to manage and almost always require a higher staff-to-participant ratio then noncognitively disabled participants.

Respite care As noted above, caregivers complained of the social isolation of care and the inability to escape, in some cases, the inability to get away for even a few hours. Taking even a short vacation all too often proves impossible. "This work load is killing my sister and brother-in-law," wrote the daughter of a dementia victim. She continued:

> They're so haggard looking. They don't get any sleep. They never get out of the house. My sister is afraid to leave my father with her husband because he [her husband] might have another heart attack .... What is going to happen to these poor souls?

It is not surprising, then, that respite care emerged as a priority need among respondents of Task Force surveys. Unfortunately, it is an ill-provided service. When asked whether they thought in-home respite services were adequate, all respondents said it was *inadequate* by a ratio of 10:1. The subgroup of respondents who were caregivers deemed respite care inadequate by a ratio of 20:1.

Financial gaps Any severe and long-term health crisis can be cripplingly expensive, but dementia poses an especially cruel paradox. It is an incurable, disabling, eventually fatal long-term illness that will demand increasing care. The health-care costs associated with this decline, however, are almost entirely not covered by private health insurance or Medicare.

Many of the most agonizing statements the Task Force received came from financially as well as emotionally devastated caregivers. Although Alzheimer's disease and related disorders are disabling organic brain diseases, there is virtually no insurance coverage to pay for care. Since there is no cure for ADRD, medical intervention is limited to the initial diagnosis (generally covered by insurance) and to the subsequent, usually relatively routine care. Essentially, there may be no medical care for insurance to pay.

Almost inevitably the patient requires nursing home placement; but nursing home costs are not covered by private health insurance or by Medicare unless skilled care is required. The care most ADRD patients require generally is defined as intermediate or custodial. Medicaid will pay for nursing home care after the couple "spends down" (that is, uses up most of their assets) but the spouse who remains in the community faces an impoverished old age. This is particularly true of the woman who has spent her life caring for home and children and thus must rely on her husband's Social Security for her own coverage: most of his Social Security check will go to pay for his nursing home care. The *Maryland Report* quoted a Caroline County woman's description of her tragic situation:

> My husband ... has worked hard all his life—spent very little on himself .... Each month, we go deeper and deeper into his principal—his annuity is good but fails by hundreds of dollars to suffice for his monthly indebtedness. Doctor's bills, medication, incontinency fees, nursing home fees, and so it goes .... What will we do to cover expenses if his funds are exhausted? And the other side of the coin, I have to live also with all the necessary expenses of food, shelter, etc.

A consequence of this system is that elderly spouses, sometimes sick themselves, jeopardize their own physical and mental health because they cannot afford to do otherwise. As a Baltimore social worker told the Task Force, a wife may struggle with her husband at home "long after ... she is unable to cope with the disease because she cannot afford to maintain herself in the community on the Social Security or SSI left to

her after nursing home placement." Matthew Tayback ScD, coordinator of the Johns Hopkins Center on Aging, encapsulated the current dilemma at a Task Force hearing when he charged that "current public policy demands . . . the impoverishment of the female spouse . . . . Public policy of this variety is a severe form of punishment of the female elderly spouse and requires a fundamental change."

Another consequence, one that touches the physician as well as the patient, is that of inadequate reimbursement for services dementia victims require. This was captured in the complaint of a physician who wished to remain anonymous:

> The medical and ethical problems of the elderly demented patient are among the most difficult both in time and complexity with which I work, but Medicare believes that this group deserves discounted services especially cognitive (nonsurgical) services. I can't afford to see many of these patients at $18 for a half-hour return visit.

Recommendations

It was on this base of findings that the Task Force made its recommendations to the Governor and General Assembly. Task Force members agreed they would not swamp the reader with recommendations, nor would they propose remedies, however useful, that seemed unlikely to be implemented. The *Maryland Report*, therefore, contained a set of 18 Recommendations, which addressed those needs that meet the standards of urgency, magnitude, likelihood of accomplishment within a foreseeable period, and which seemed fiscally attainable. An appendix listed 35 Further Recommendations—needs that must be addressed in due time but which the Task Force thought were not so pressing they should detract from the immediate implementation of recommendations of higher priority.

We give these recommendations in the most skeleton form. We hope the rationale for them has been made clear by the foregoing discussion.

To develop a **comprehensive and coordinated system of service resources**, the Task Force recommended that Maryland: (1) develop a pool of respite caregivers to relieve family caregivers; (2) encourage nursing homes and hospitals to be receptive to short-term respite stays by dementia patients; (3) expand and extend adult day-care centers; (4) extend the network of mutual-help support groups; (5) provide legal and financial counseling through existing channels; (6) improve and extend diagnostic resources; and (7) delete or modify language in state documents that refer to Alzheimer's disease or multi-infarct dementia as "psychiatric disorders."

This last recommendation, A-7 in the *Maryland Report*, proved to be one of the Task Force's most controversial. Its genesis lay in the Task Force's concern that dementia victims and their families suffered financially because insurance coverage is generally inadequate for disorders labeled "psychiatric." The Task Force viewed the designation of dementing illnesses as organic disorders as tactically imporant in the battle to achieve appropriate health insurance coverage for ADRD patients and their families.

To address the need for **more comprehensive education and training**, the Task Force recommended that the state (1) develop dementia training centers of excellence; (2) incorporate dementia content in educational curricula (and that licensure and certification bodies or boards include dementia questions on their examinations); (3) add dementia content to the state curriculum for geriatric aide training; (4) include dementia instruction in state-mandated in-service education by long-term care facilities; and (5) engage the Alzheimer's Disease and Related Disorders Association/Central Maryland to conduct informational and educational activities.

To meet the need for **financial relief**, the Task Force recommended that the State (1) extend its Gateway II program, intended to prevent inappropriate nursing home placement, to all Maryland counties; (2) seek easing of eligibility and service restrictions in federal and state programs; (3) furnish financial incentives to families averting institutionalization costly to the state; and (4) induce the insurance industry to develop long-term care coverage.

And finally, to **collect data badly needed for comprehensive health planning**, and to insure a coordinated follow-up to its recommendations, the Task Force urged that the state develop a statewide representative data-base on dementia and that it charge a state agency with coordinating and monitoring progress on the Task Force's recommendations.

Conclusion

The 1986 General Assembly addressed some of the Task Force's concerns by passing five bills covering data collection, adult day care, optional insurance coverage for dementia victims, and the education of geriatric aides and others about dementia (this last the topic of two bills). A coordinating council, established by joint resolution of the House of Delegates and Senate, will monitor follow-through on Task Force Recommendations and make recommendations of its own. The Governor's budget also included $5,600,000 in new money for long-term care needs, including the allocation of $500,000 for new adult day care centers. Further, at the request of the Governor, University of Maryland Chancellor Edward N. Brandt, Jr., has ordered a Uni-

versity task force to come up with a plan to coordinate gerontology offerings (including training about dementing illnesses) of the professional schools. It is likely that other concerns will be voiced through the legislative process in the coming session.

In addition to the specific recommendations discussed above, the Task Force came to two conclusions of a broader nature. The first was that the needs of dementia victims and their families are so pressing and the consequences of the disorder so tragic that ADRD forms a category deserving of special measures as described above. This focus on dementing illnesses concerned some advocates of the elderly who thought it deflected attention from other pressing issues. "Let's not get fired up over ADRD," cautioned a Baltimore physician, "when we do such a poor job with all other aging problems." Task Force members, many of whom were responsible for the care of elderly patients or clients with serious problems other than ADRD, were not unmindful of these needs, yet they argued that the needs of ADRD victims and their families were "uniquely burdensome." As the *Maryland Report* stated, "Family members or friends are left taking care of a shadow of the previous person, who eventually cannot even recognize spouse, children, or close friends." However, while its mandate limited its inquiry to dementing illnesses, the Task Force was hopeful "that any measures and innovations described for the benefit of Alzheimer's disease and related disorders will be applied more broadly and eventually will benefit other types of chronically ill and disabled individuals."

The second broad conclusion was that the physician and other health care professionals, as well as health care planners and public policy makers, must focus their attention on the family care unit. Those measures that will sustain the caregivers in continuing to provide care for their loved ones will benefit the dementia victim. Aside from reasons of compassion, society has an interest in supporting family care units, as such measures will forestall institutionalization (at public expense) by maintaining the victim (at the family's expense) in the home.

As we have indicated, dementing illnesses present impressive challenges to public policy and to medical practice. It is a challenge that will grow with Maryland's aging population, affecting larger numbers as those now in middle-age swell the number of elderly. An elderly caregiver spoke for this future geriatric population when she urged the Task Force to devise solutions. "It's too late for me," she said, "but maybe you can help the younger people."

The Maryland Report on Alzheimer's Disease and Related Disorders may be obtained without charge from William Reichel MD, Franklin Square Hospital Center, Baltimore, MD 21237.

Bibliography

Brody, J.A. "An Epidemiologist Views Senile Dementia—Facts and Fragments." *Am J Epidemiol* 115(1982):155–62.

Folstein, M.F.; Folstein, S.E.; and McHugh, P.R. "A Practical Method for Grading the Cognitive State of Patients." *J Psychiatric Res* 12(1975):189–98.

Governor's Task Force on Alzheimer's Disease and Related Disorders, State of Maryland. *The Maryland Report on Alzheimer's Disease and Related Disorders*. Baltimore, MD, 1985.

Katzman, R. " Alzheimer's Disease." *N Engl J Med* 314(1986):964–73.

Mace, N.L. and Rabins, P.V. *The 36-Hour Day: A Family Guide to Caring for Persons with Alzheimer's Disease, Related Dementing Illnesses, and Memory Loss in Later Life*. Baltimore, MD, 1981.

McKhann, G. *et al.* "Clinical Diagnosis of Alzheimer's Disease: Report of the NINCDS-ADRDA Work Group under the Auspices of the Department of Health and Human Services Task Force on Alzheimer's Disease." *Neurology* 34(1984):939–44.

Reichel, W. "The Evaluation and Management of the Confused, Disoriented or Demented Elderly Patient." In Reichel, W. *Clinical Aspects of Aging*, 2d ed, Baltimore, MD 1983, pp. 151–65.

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Ethical and Legal Issues in Geriatrics: Competence and Patient Choice

STEVEN A. LEVENSON MD

Medical attention to ethical issues has increased dramatically in the past five years. Geriatrics has been a focus of much of this attention because of the frequency of pertinent problems related to competence, consent, terminal care, and treatment and nontreatment. Both institutions and individual practitioners are unclear about many of these problems and also are unsure about the boundaries between ethical options and legal requirements.

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One of the fundamental rules of medicine is to gather as much information as possible in any situation before reaching a conclusion about what to do. Unfortunately, this often has been done in reverse when it comes to making ethical decisions: we have jumped to the question of "What shall we do?" and largely skipped over the process of gathering pertinent information. Many of the practical problems of ethical decision making in medicine could be reduced greatly if we simply followed proper procedure.

There are three equally important elements to the ethical decision making process: (1) data gathering about patient and family wishes, (2) presentation of options to patient and family, and (3) staff conclusions about what they will or will not do for the patient. These procedures are especially helpful for dealing with patients who want to express their choices about future care in the event of their possible incapacity to do so or for handling patients who are incapable of making decisions at the time they are admitted.

Implications of Judgments of Competence

With rare exception, the competent individual is assumed by law to have the right to speak on his/her own behalf, regardless of what others, including close relatives, want for him/her. It is widely accepted that a person's best interests are served through informed choice. Especially in the Western World, the individual is encouraged and expected to exercise autonomy, and to take responsibility for his/her conduct and decisions.

The declaration of incompetence has substantial social and personal ramifications but, perhaps most importantly, a loss of individual freedom.

Many books and articles, in discussing a variety of ethical issues concerning care of the elderly, have freely used the terms "competence" and "incompetence." For example, "A *competent* adult has a right to make his own decisions," or "Only a *competent* person can choose to participate in certain research," or "Proxy consent may be offered in certain circumstances on behalf of an *incompetent* patient."

Therefore, the issue of competence is central to the practice of medicine and other health professions. The key questions for the health-care practitioner caring for the elderly are, who is competent and who is not, and how do we decide? After this, the questions become: What shall we do, or not do, for the incompetent person, and why? This opens another set of issues in medical care, but they all come back to the original question.

The Meaning of Competence

For convenience, "competence" sometimes is classified as one of the following: (1) the capacity to conduct business and financial affairs, (2) the capacity to make decisions on medical care, and (3) the capacity to function in activities of daily living. In other words, in the broadest sense, competence means *functional abilities*: the capacity to function adequately and appropriately in a given cultural setting to meet personal needs according to public expectations and to meet social requirements. The variable nature of competence is shown by the fact that there is not just one definition of the term. Legal, ethical, and psychological viewpoints each employ different criteria.

The *legal* definition looks primarily at how a person fits in with a defined status; for example, age, citizenship, or soundness of mind. For instance, a person generally is considered not legally competent to consent to treatment if he/she is unconscious or suffering from the effects of drugs or alcohol, dementia, or mental illness, or if he/she is below a certain stipulated age.

An issue central to all legal determinations of competence is whether a person can reasonably understand the condition, nature, and effect of the proposed treatments and the risks of choosing or not choosing those treatments. Thus, the law makes a presumption that if someone is 24 years old and not legally insane, that person is capable of carrying out certain legally delineated tasks such as writing a will. Conversely, a person who does not meet the legal definition for competence is considered incapable of legally performing the act. Thus, a 13 year old is considered not competent to write a will, even though he/she may have more understanding of the process than someone three times the age.

In contrast, the *psychological* concept of competence relates more to the specific mental or behavioral capacities needed to perform a certain task. Thus, though a

12 year old might be considered legally incompetent to manage her own financial affairs, she might nonetheless be perfectly capable of the most intricate mathematical computations. The African bushman is not immediately psychologically competent to perform many of the tasks that would be required to live in Los Angeles. An elderly individual might be legally competent yet unable to properly make decisions on her own behalf because of certain thought disturbances.

From the *ethical* viewpoint, competence is a description of a state of being having several attributes: voluntariness, intentionality, authenticity, and consistency with values. According to various ethicists, a person is acting competently if the act is *voluntary* (autonomous, free from the control of some other authority, and done with the freedom to act on the basis of one's own critical, rational thought), *intentional* (deliberately chosen, willful), *authentic* (consistent with values, self-concept, etc.), and follows effective deliberation (consequences and alternatives are understood).

The President's Commission for the Study of Bioethical Issues proposed that "Decision-making capacity requires, to greater or lesser degree: (1) possession of a set of values and goals, (2) the ability to communicate and understand information, and (3) the ability to reason and to deliberate about one's choices." Again, competence is a function of possessing and processing information (beliefs, attitudes, and working assumptions that guide decision making) as much as it is any demonstrated ability or skill.

Need for Determinations

An elderly individual might be involved in certain situations or need to perform any number of tasks for which some determination of competence would be highly relevant including: (1) writing or revising a will or estate; (2) managing personal financial affairs or those of others; (3) consenting to or refusing food or treatment; (4) consenting to become an experimental subject; (5) disruptive behavior and the need of institutional staff to control it; (6) assessment of changes in mental status; (7) guardianship and proxy consent; (8) wishes regarding treatment in time of terminal illness; (9) being admitted to (or desiring discharge from) a hospital or long-term-care institution.

Even seemingly simple issues can present competence questions. For instance, a fairly common conflict at long-term care facilities is over the right of patients to refuse to adhere to their diets, to knowingly eat foods the physician says are bad for them, or to refuse to eat at certain times.

Not every task requires the same level of competence. The urgency and seriousness of the need for determination of competence depends on the importance of the task at hand. A patient's choice of clothing or of lunch options is not likely to adversely affect health, life, or safety. A decision to have surgery or to participate in a research project most certainly will. The level of mental functioning necessary for these various tasks is different.

Traditionally, many determinations of competence have been blanket declarations: a person is declared either "competent" or "incompetent," period. Current thinking on the issue has begun to reflect a different orientation; specifically, that competence determinations ought to be *task specific.*

What Competence is Not

In medicine, competence determination has been a haphazard affair, at best. The most frequent objective test for competence has been the mental status examination. The patient is asked certain questions to perform specific tasks ("write your name; add 2 + 6; name this object"), and the information is used for various assessments.

But mental status is not the same as competence. Mental status is supposed to reflect the current operation of certain mental activities: remembering, recalling, paying attention. This is not the same as the capacity to perform certain tasks. For example, if you have a stroke, you can remember how to tie your shoe yet be physically incapable of doing so. On the other hand, if you have Alzheimer's disease, you can tie your shoe but not recall after five minutes that you did so.

Written assessments such as, "Mental status: patient incompetent" are neither accurate nor appropriate. Mental status is not a single measurement but rather a collection of assessments of specific aspects of thinking, reacting, and acting. Mental status is signs and symptoms, not diagnoses. Mental status reflects observation; competence is a label, substantially based on the findings of the mental status examination.

You don't have to be demented to have questionable competence. A highly anxious person may appear disoriented because she appears to easily forget things that she is told, such as peoples' names, the current date, or the details of consent forms. In fact, such a person often does not pay attention in the first place and thus does not absorb information. Such problems may or may not affect a person's competence to perform a specific task.

Expressions of various personality traits or emotional disorders are not to be mistaken for competence or incompetence. It is possible (and not uncommon) for a belligerent, uncooperative older person to be labeled incompetent because he will not accede to the suggestions of physician or family. Not infrequently, the com-

petence of an older person is not called into question until that individual disagrees with some recommendation. Therefore, it is a good idea for competence to be assessed before recommendations are made or decision-making situations arise.

In addition, lack of information has been shown to lead to refusal to accede even to routine tests; thus caretakers may be responsible for provocations that they reverse to interpret as deficiencies of the patient.

The Gap between Mental Status and Competence

There are several important steps in the process between any measurement of mental status and any conclusions about determining competence:

1. Decide which tests accurately measure the particular aspect of mentation questioned.
2. Administer those tests evenhandedly from one person to the next.
3. Record and interpret the results of those tests.
4. Decide which aspects of mental activity are necessary for which tasks.
5. Determine which aspects of mental status were deficient in the individual and whether the combined deficiencies preclude adequate performance of certain tasks.

In evaluating patients, especially the elderly, one or more of these steps often is skipped. The speed and accuracy with which questions are answered by the patient certainly influence the interpretation of results.

Before a person can process, ponder, and decide upon information, he or she must have an intact physiological system. It is important not to condemn an older person as incompetent until certain physical causes of dementia and delirium have been ruled out, including infections; fluid and electrolyte imbalances; drug toxicity; endocrine dysfunctions, such as thyroid disease; and other problems like anemia, heart disease, or stroke.

While it is very important to find the reasons for mental status alterations to eliminate treatable causes, the etiology of mental status alterations is irrelevant to determining competence. An individual either can or cannot perform a required task; in the matter of competence we are concerned with function rather than with etiology.

Determining Competence

Competence determinations are thus conclusions. How do we decide that, at any point, a specific individual is competent to perform a particular task or to meet other specific expectations?

The physician has the ultimate responsibility for the conclusion about the patient's decision-making capacity, but this conclusion should not be based only on the physician's observations. Other pertinent information includes results of mental status examination, nursing staff and social service evaluation, psychiatric consultation, or other psychological testing.

The President's Commission has suggested that a person should be considered competent if he/she meets the criteria for being able to make decisions, especially about his/her health care. The person should be able to demonstrate (1) certain values or goals, (2) the ability to communicate and understand information, and (3) the ability to reason and to deliberate the various choices.

Competence determination thus properly goes beyond mere status (that is, whether someone belongs to a certain category as defined by the law). The increasingly held consensus appears to be that competence is rarely an all-or-none proposition (such as when someone is comatose). Function should be measured and matched with the task at hand. Thus, even an elderly person considered "senile" might have the mental functions necessary to make certain decisions on his/her own behalf.

Step 1: *Observation and data gathering by staff.* Does the person seem aware of his/her surroundings; notice things if pointed out; ask for meals at appropriate times; or ask questions about time, place, and person?

What are (or were) previous behaviors, statements, values?

Can the person communicate and understand information?

How does the person perform when asked to reason or deliberate choices?

Step 2: *Rule out physical causes for mental status alterations.* Based on observations, physical examination, and laboratory studies, consider potential physical explanations for alterations in mental status.

Step 3: *Mental status evaluation.* Acquire some objective information about a person's cognitive and emotional status. For instance, the person who is labeled demented but who scores high on the MS exam probably is not demented; some other explanation for symptoms should be sought or the erroneous diagnosis should be removed.

Step 4: *Discussion.* The staff should discuss their findings at preliminary conferences, one week to several weeks postadmission. Coordinated discussion

helps point out information relevant to competence that might have been overlooked. The nursing staff spends far more time with the patient than does any physician or psychiatrist and frequently can provide pertinent information.

Step 5: *Reevaluate.* Labels of dementia tend to stick as if they were applied with superglue. This is incompatible with the concept that mental status can fluctuate over time, depending on personal and environmental factors. Therefore, when initial decision-making capabilities are unclear, the assessments should be repeated over time as necessary. Meanwhile, testing and treatment should be done to try to maximize competence.

What Does the Patient Want?

Other questions pertinent to decisions about what should be done for an older patient are: what does the patient want? Is the patient *capable* of deciding appropriately (and of telling us) what he/wants?

Prior to admission, the referring sources are asked if they know of any statements or other evidence of the wishes of patient or family concerning care in the event the patient is or subsequently becomes unable to express such wishes. As part of the preadmission assessment, an attempt is made to ascertain whether the patient has shown evidence of being capable of participating in discussions and decisions related to his/her medical care. A capable patient is asked on or after admission for any general or specific thoughts or wishes about these care issues. The family can be included in the discussion (or approached separately), but the patient's wishes take precedence.

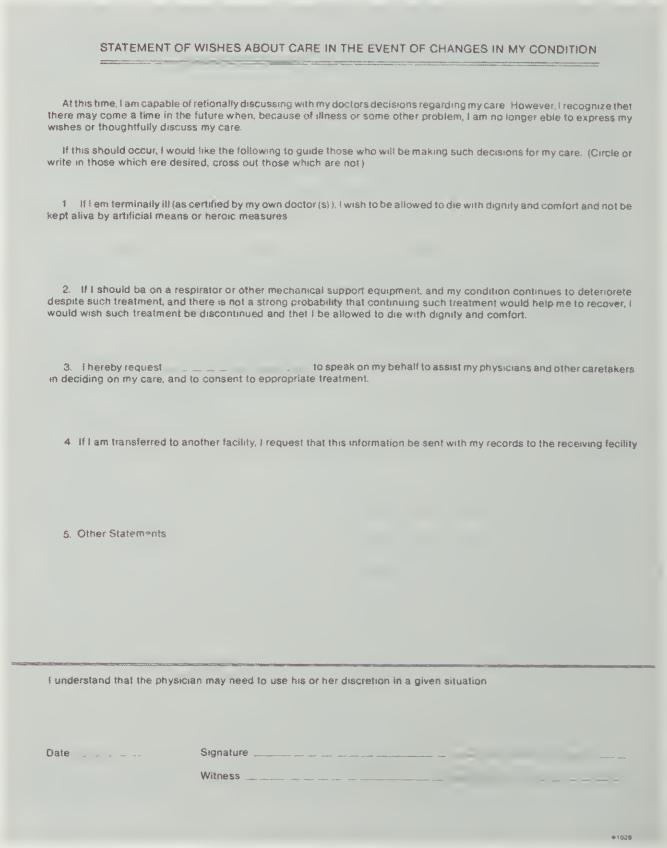
On or shortly after admission of an incapable patient, the family is queried for any specific instructions or information that could guide subsequent decision making about care issues. If neither patient nor family are interested in discussing the subject, it will not be pursued until after the patient has become adjusted to the setting or indicates interest.

Options Levindale Offers

Although most public attention and legislative action have focused on the "living will," other issues besides terminal care are pertinent to the elderly patient's autonomy. These include more general statements about treatment and care and about desires in the event of later incompetence. Sometimes the patient has definite opinions on care issues while the family does not, or vice versa. At other times, patient and family do not agree on these issues.

The first document presented to either patient or family is the "Statement of Wishes" (below). This is *not* a living will, but an opportunity to express preferences on a variety of items. There is a choice to complete some, all, or none of it. If desire to make a living will is expressed, there is opportunity to make a formal will along the guidelines of the state. However, it is important to note that a person does not have to use those guidelines in order to express his/her wishes and that staff does not have to have a living will in order to agree to the patient's wishes. (In 1985 the Maryland State legislature passed a "living will" law, similar to those existing in a majority of states. The living will is backed by a legal insistence that a person's wishes about terminal care **must** be honored by the attending physician.)

If there is an interest in a living will or similar statement concerning specific wishes about terminal care, the patient or family, as appropriate, is provided with a copy of a prototype living will consistent with state requirements. Assistance as appropriate is given in completing such a document. Such signed statements or requests are considered a part of the permanent medical record and are stored in the chart. These direc-



STATEMENT OF WISHES ABOUT CARE IN THE EVENT OF CHANGES IN MY CONDITION

At this time, I am capable of rationally discussing with my doctors decisions regarding my care. However, I recognize that there may come a time in the future when, because of illness or some other problem, I am no longer able to express my wishes or thoughtfully discuss my care.

If this should occur, I would like the following to guide those who will be making such decisions for my care. (Circle or write in those which are desired, cross out those which are not.)

1. If I am terminally ill (as certified by my own doctor (s)), I wish to be allowed to die with dignity and comfort and not be kept alive by artificial means or heroic measures.

2. If I should be on a respirator or other mechanical support equipment, and my condition continues to deteriorate despite such treatment, and there is not a strong probability that continuing such treatment would help me to recover, I would wish such treatment be discontinued and that I be allowed to die with dignity and comfort.

3. I hereby request _____ to speak on my behalf to assist my physicians and other caretakers in deciding on my care, and to consent to appropriate treatment.

4. If I am transferred to another facility, I request that this information be sent with my records to the receiving facility.

5. Other Statements

I understand that the physician may need to use his or her discretion in a given situation.

Date _____ Signature _____

Witness _____

tives will be sent with other chart materials at the time of transfer to another facility.

At Levindale our living will essentially follows the guidelines of the state law, as interpreted by the Maryland Hospital Association advisory task force report, recently sent out to area institutions.

Most of our patients are unable to give consent for a variety of problems and often we must obtain proxy consent. It is impractical to go to court for every decision about the competence of long-term care patients. Current trends and rulings favor obtaining proxy consent without preliminary court-appointed guardianship, when the proxy consenter is a close relative or associate acting in the patient's best interest. The guarantor (the person responsible for the patient's bill) is not necessarily the person of first contact for medical care decisions.

But who to contact and in what order? We first try to ascertain if an individual has indicated a specific person or order of preference for proxy "consenters." Otherwise, we try to follow this order, consistent with guidelines set down in an opinion of the state's attorney general's office in 1984:

* A spouse, or if not reasonably available,
* An adult child, or if not reasonably available,
* A parent, or if not reasonably available,
* An adult sibling, or if not reasonably available,
* A grandparent, or if not reasonably available,
* An adult grandchild.

Staff Conclusions Regarding Care Options

Any conclusions about treatment in the event of critical or terminal illness are an endpoint that should be reached only after data collection and discussion. The physician makes the ultimate decision about the level of treatment or care but need not and should not make the decision alone or unaided.

Available evidence to help reach a conclusion includes (but is not limited to) (1) patient wishes; (2) expression by family or representative of patient wishes; (3) objective observations by all staff; and (4) conclusions about medical condition and prognosis.

Levindale's classification system for levels of care is ultimately a guideline for staff, a summary of specific components of a given level of care (for example, transfer to an acute hospital or nothing except measures for comfort and pain relief). The classification is not an order but a plan of care. For example, the fact that antibiotics might be indicated does not necessarily mean they should or will be ordered or administered in a given instance.

The "no-resuscitation" classification should be covered by a signed physician's order, as described in a pertinent institutional policy. When a patient meets those criteria for nonresuscitation, we write a "Do Not Resuscitate" (DNR) order in the chart.

CPR includes all physical, mechanical, electronic, or chemical intervention used to try to help a patient recover following spontaneous cessation of cardiac or pulmonary function. When a no-CPR or DNR order is written, none of these methods will be used in the event of sudden, spontaneous cessation of cardiac or pulmonary function. Levindale's guidelines are as follows:

1. The attending physician should decide when to write the DNR order after consultation and agreement with patient or family.
2. The attending shall write the DNR order directly, except under extraordinary circumstances. A verbal DNR order should be witnessed and documented by two nurses, and must be countersigned within 24 hours.
3. Documentation should include: a summary of the person's condition, the names of persons involved in the decision making leading to the DNR status, and a brief description of the wishes of the patient or authorized proxy.
4. The attending physician should periodically review the DNR order after reassessing the patient's condition, to ensure that the order remains appropriate.

Ethical and medical treatment issues are intimately interrelated and inseparable in the care of the elderly. The same processes of observation and discussion used to reach medical conclusions and to decide on medical therapies are very relevant to ethical considerations as well. Competence is a major issue on which many other decisions and conclusions in the care of the elderly are based. We need to rethink our current approaches and underlying concepts—and revamp our procedures—in the interest of doing what is "best" for our older patients.

Alzheimer Disease. Meridian Healthcare is helping to do something about it.

As the largest provider of long-term nursing care in Maryland, Meridian Healthcare is in a unique position to exercise some leadership in developing new techniques for caring for Alzheimer victims. Even more important, we have made a commitment to actively assist with the search for a cure for this serious, terminal condition.

A specialty Alzheimer Disease Care Unit has been created at Meridian Nursing Center—Heritage in consultation with The Johns Hopkins University Medical Institutions to develop innovative approaches to care. To advance this research, Meridian funds an Alzheimer Disease Research Fellowship in The Johns Hopkins University Department of Psychiatry.

Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

Our concern with Alzheimer Disease is only one of many ways Meridian Healthcare is different. For more detailed information on our Alzheimer program or on any of our 13 Nursing Centers in Maryland, call or send the coupon for our free *Referrer's Guide*.

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Psychotropic Medication for Elderly Patients: Use with Caution

PAUL E. RUSKIN MD, GARY W. NYMAN MD, and THOMAS F. KRAJEWSKI MD

A review of the existing medical practice patterns reveals that more psychotropic medication is prescribed for the elderly than for any other age cohorts.[1] However, these medications bring greater problems for the elderly. While side effects are virtually universal with such drugs, special caution must be exercised when treating older patients with medication.

Physiologic changes associated with aging alter the pharmacokinetics of psychotropic drugs in the elderly. A decrease in lean body mass and total body water, coupled with an increase in total body fat, leads to decreased plasma concentration and slower elimination of fat-soluble drugs. A decrease in serum albumin results in a higher percentage of unbound, metabolically active drug. Decreased drug elimination due to decreased hepatic enzyme activity and blood flow and to decreased renal function prolongs the half-life of many medications. The net result of these changes is that most psychotropic medications, which are generally fat soluble, have a longer half-life in the elderly. Reduced doses, generally 30 percent to 50 percent of normal, are often indicated.

The elderly constitute only 11 percent of the population, but they receive 40 percent of prescriptions for sedative-hypnotic agents. Before prescribing a sedative-hypnotic for an elderly person with insomnia, it is important to first focus on other treatable causes of insomnia. Insomnia can be a sign of depression. In these cases, an antidepressant rather than a sedative-hypnotic should be used. Sleep patterns change with age.[2] Elderly patients tend to awaken more frequently during the night and to nap more during the day. Often, the older patient who complains of insomnia is simply experiencing a change in his or her previous sleep pattern, but there is no decrease in total sleep. Treatment with medication under such circumstances usually is contraindicated. The use of sedative-hypnotics in a patient with severe chronic obstructive pulmonary disease can have serious consequences and can be lethal in a patient with sleep apnea, a sleep disorder where spontaneous awakening prevents suffocation.

Depression is a common disorder among the elderly. It is often mistaken for dementia or normal aging. Antidepressants are effective, but must be used with caution because of their numerous side effects.[3] Orthostatic hypotension, which can cause potentially dangerous falls, urinary retention (especially in patients with an enlarged prostate), impaired visual accommodation, constipation, delirium, oversedation, and decreased sweating with hyperthermia are all potentially serious side effects for elderly patients. The so-called secondary amines, antidepressants such as desipramine and nortriptyline, have fewer side effects and should be used in preference to tertiary amines such as amitriptyline and imipramine. Elderly patients who are unable to tolerate the standard antidepressant medications should be considered for treatment with alprazolam (a benzo-diazepine that has some antidepressant properties as well as some sedative effects), methylphenidate, or MAO inhibitors. Electric convulsant therapy is to this day still the safest, most effective treatment of severe depression.

Benzodiazepines are notorious for causing an impaired mental status in the elderly. They should, therefore, be used with caution in this population. Diazepam has a 20-hour half-life in 20 years olds, but a 90-hour half-life in 80 years old. However, the shorter-acting benzodiazepines, such as lorazepam and oxazepam, have roughly the same half-life in the old and the young. A moderate dosage reduction is required for the elderly with these shorter-acting benzodiazepines, making them more useful than the longer-acting ones.

Antipsychotic agents also can be useful in the elderly in the treatment of psychotic symptoms and disruptive behavior. The high-potency neuroleptics, such as haloperidol and fluphenazine, have a high incidence of extrapyramidal symptoms. These can be particularly disabling in an elderly patient already restricted in his/her movements by arthritis, a cerebrovascular accident, or other medical problems. Low-potency neuroleptics, such as chlorpromazine and thioridazine, have a high incidence of orthostatic hypotension. Elderly patients are more susceptible to tardive dyskinesia than are young patients. Therefore, antipsychotic medication should be avoided when possible and carefully titrated when indicated.

Lithium can be effective in the treatment of elderly patients. However, the elderly are more prone to neurologic toxicity than are younger patients. The lithium level must be monitored more closely, and the level should be maintained in a lower range (.5 to .8).

Prior to the prescription of psychotropic medication for elderly patients, careful screening must be conducted to rule out numerous physical causes for the psychiatric symptoms. Particular attention should be paid to other medications elderly patients are taking, as side effects or adverse drug interactions often can clinically mimic a psychiatric disorder. Care should be taken to discover deficits such as impaired renal or hepatic function that might impair the metabolism or excretion of the psychotropic medication.

In summary, psychotropic medications are useful in the treatment of elderly patients with a wide variety of psychiatric disorders. They must be used carefully in this patient population, generally at lower starting and

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

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maintenance doses. Close monitoring for adverse side effects is essential to prevent untoward events and to ensure the benefits of the treatment outweigh the risks from their prescription.

References

1. Thompson, T.I.; Moran, M.G.; and Nies, A.S. "Psychotropic Drug Use in the Elderly" (first of two parts). *N Engl Med* 308(1983):134–38.
2. Dement, W.C.; Laughton, M.E.; and Carskadon, M.A. White Paper on Sleep and Aging. *Geriatr Soc* 30(1982):25–50.
3. Thompson, T.I.; Moran, M.G.; and Nies, A.S. "Psychotropic Drug Use in the Elderly" (second of two parts). *N Engl Med* 308(1983):194–99.

We invite your comments as well as scientific articles. Write *Letters to the Editor* and *Commentary* *MMJ*, 1211 Cathedral St, Baltimore, MD 21201

Library Page

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during August 1986.

	Number of Citations
1. Bupivacaine as an obstetrical anesthesia	21
2. Computers and medical education	30
3. IGA glomerulonephritis	22
4. Legal or ethical aspects of withdrawing life support care or enteral feeding	28
5. Papaverine and sex disorders	13
6. Physicians, nurses, and interprofessional relations	20
7. Psychological impact of the Holocaust on children of survivors	43
8. Regression of metastatic melanoma	32
9. Self-mutilation	16
10. Vesicovaginal fistula as a complication of gynecological or bladder surgery	22

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

SUSAN E. HARMAN
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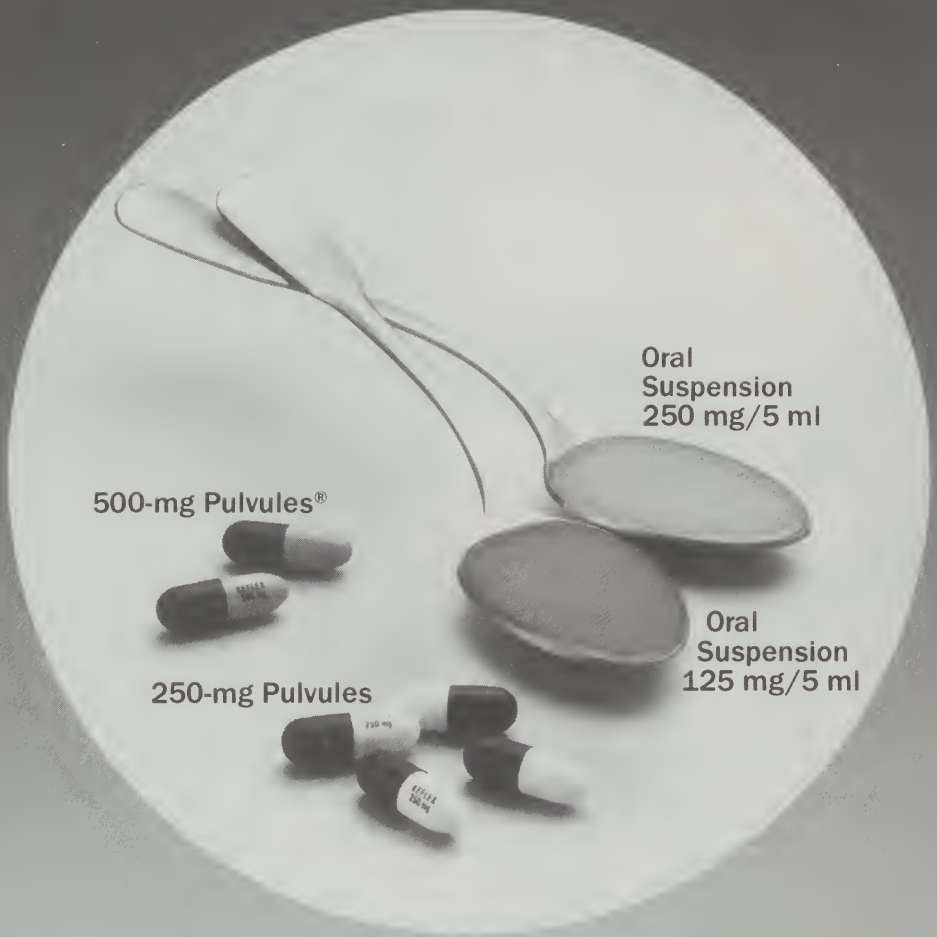
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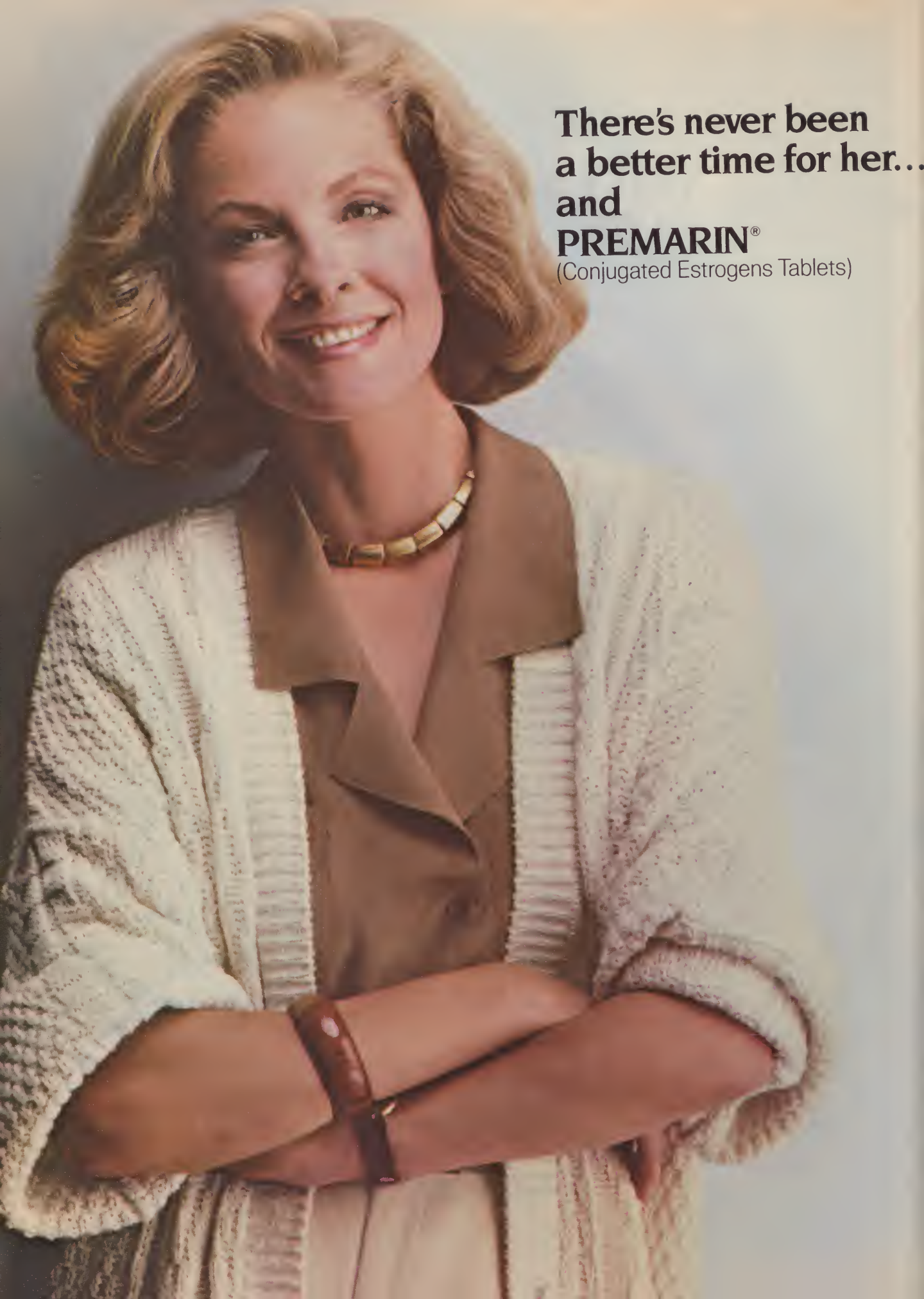
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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g. Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

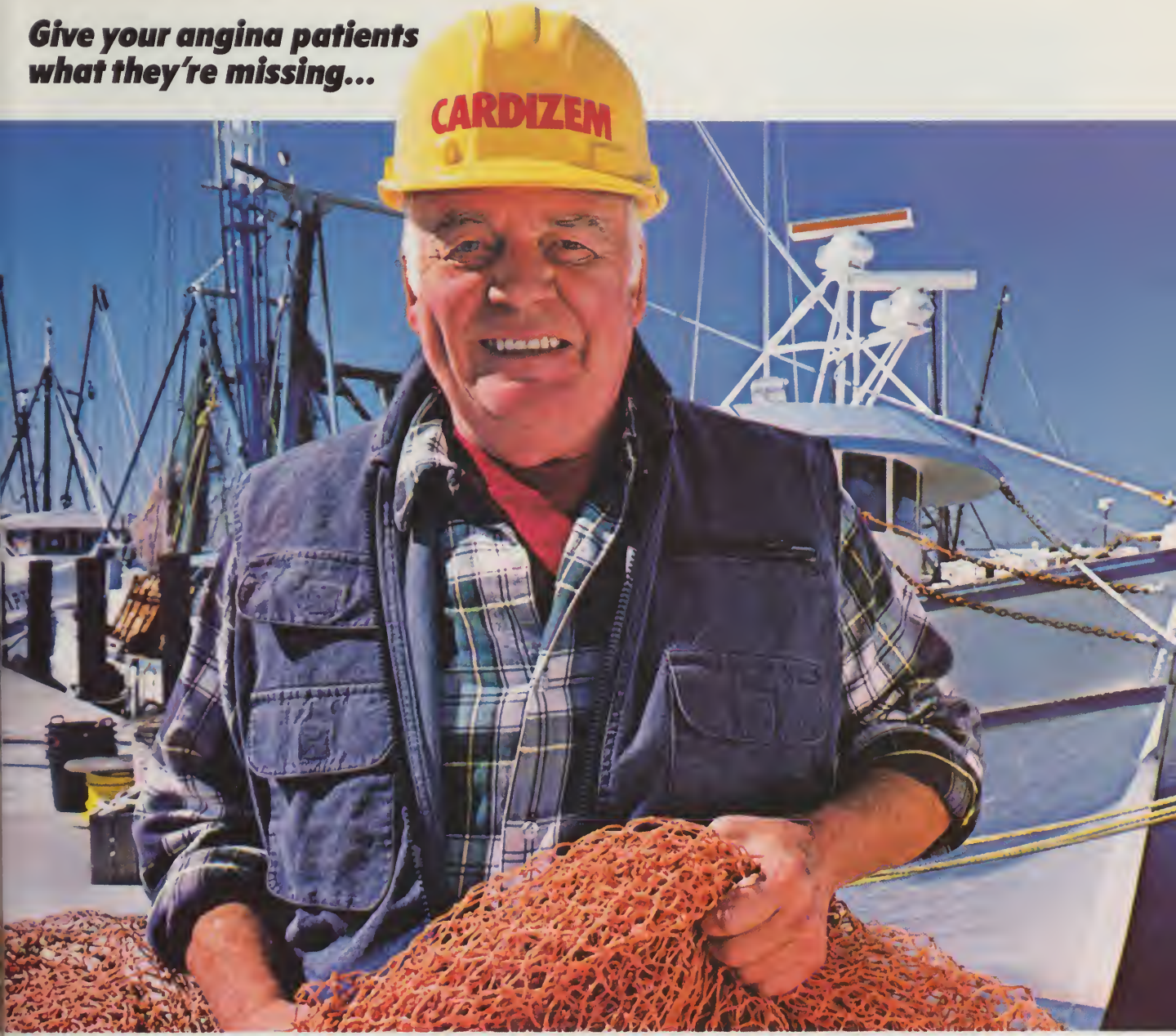
1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605 **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985; 67: 496-499. **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:1;41-52. **5.** Barnes RB, Roy S, Lobo RA: Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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***See Warnings and Precautions.**

Please see brief summary of prescribing information on the next page.



CARDIZEM® FEW SIDE EFFECTS IN ANTIANGINAL THERAPY

diltiazem HCl/Marion

60 mg tid or qid

Brief Summary
Professional Use Information

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CONTRAINDICATIONS
CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. ***Cardiac Conduction.*** *CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.*
2. ***Congestive Heart Failure.*** *Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt).*
   Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. ***Hypotension.*** *Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.*
4. ***Acute Hepatic Injury.*** *In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)*

PRECAUTIONS
General. *CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.*

Drug Interaction. *Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)*

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects at cancomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. Na intrinsic effect on fertility was observed in rats.*

Pregnancy. *Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses at 20 times the human dose or greater.*

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. *Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.*

Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS
Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastrointestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 7/86*

See complete Professional Use Information before prescribing.

References: ***1.*** *Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347.* ***2.*** *Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159.* ***3.*** *Johnston DL, Lesaway R, Humen DP, et al: Clinical and hemodynamic evaluation of propranalol in combination with verapamil, nifedipine and diltiazem in exertional angina pectaris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol 1985;55:680-687.* ***4.*** *Cohn PF, Braunwold E: Chronic ischemic heart disease, in Braunwold E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39.* ***5.*** *Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.*

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The Prognostic and Therapeutic Value of Steroid Hormone Receptors in Breast Cancer

Breast cancer can be divided into two biological types: hormone-dependent and hormone-independent tumors. Hormone-independent or autonomous tumors grow and spread independent of the hormonal environment. On the other hand, the cells of the hormone-dependent tumors contain a molecular receptor in the cytoplasm that is specific for the hormone. Such receptors are capable of binding with the hormone, becoming activated, and moving into the cell nucleus. Ultimately, that complex must affect DNA synthesis. Lack of such receptors within tumor cells or derangement of the mechanism within the complex of the hormone activation cascade can render the tumor cells hormone-independent.

The level of the hormone receptors in breast cancer tissues can best be assayed and accurately measured by the commercially available glycerol density gradient method. Fresh tumor tissues from the operating room, from the primary or metastatic tumors, should be submitted to the laboratory on ice, with no fixatives, and stored in deep-freezer conditions, that is, at −80 degrees C. The tissue must be assayed within one week to prevent degradation that will lead to false low or even false negative results. If the tumor tissue is left at room temperature for 20 minutes or more, it will result in degradation of the receptors.

Two hormonal receptors can be measured: estrogen and progesterone. Values of 10 fmole/mg protein or greater are considered positive, and less than 10 fmole/mg protein are considered negative. The division between hormone-positive and hormone-negative tumors is not absolute, cells within an individual breast cancer are extremely heterogeneous. Thus, when a tumor is classified, for example, as estrogen receptor positive, not all cells will contain estrogen receptors. Conversely, tumor cells classified estrogen receptor negative usually contain some tumor cells with receptors. The majority of breast cancers are hormone dependent with an overall incidence of 60 to 70 percent. However, premenopausal women have only 33 percent positive receptors, compared to postmenopausal who have over 70 percent receptor-positive tumors.[1] Furthermore, when estrogen receptors are positive, the progesterone receptors also are positive in 85 percent of the instances.

The level of the hormone receptors has two major values: prognostic and therapeutic. From a prognostic point of view, the disease-free survival of patients with estrogen-receptor-positive tumors is significantly longer than when compared stage by stage. The same was noted to be true for those with progesterone-receptor-positive tumors when compared to progesterone-receptor-negative ones, but only in patients with Stage II disease, that is, with metastasis to axillary lymph nodes. It seems that the prognostic value of estrogen receptors in breast carcinoma is more significant than that of progesterone receptors. However, the status of both receptors is prognostically significant secondary only to the status of the lymph nodes.

Therapeutically, manipulation of the hormonal environment to deprive estrogen-dependent tumors of stimulation can be accomplished in a number of ways, such as surgery or irradiation of the ovaries, and more recently by Tamoxifen (Nolvadex), which is available commercially. Tamoxifen has very few and mild side effects and is much better tolerated than the cytotoxic agents with which it can be combined. Tamoxifen counters estrogen, not at its source, but where it acts within the tumor cell. However, Tamoxifen binds to the cytoplasmic estrogen receptor in the tumor cells competitively with estradiol. The lower the level of estrogen in the sera, the more effective is Tamoxifen. As an adjuvant therapy, patients with estrogen-receptor-positive tumors benefit the most when they receive Tamoxifen (10 mg b.i.d., P.O.) with chemotherapy, Protocol B-09 by National Surgical Adjuvant Breast/Bowel Project, NSABP.[2] In this study, it was also noted that the disease-free survival increased as a quantitative function of estrogen receptor positivity. For metastatic disease, premenopausal women with estrogen-receptor-positive tumors should undergo oophorectomy, then Tamoxifen therapy. On the other hand, postmenopausal women with estrogen-receptor-positive tumors can be manipulated hormonally by receiving Tamoxifen or estrogen (DES).

Therefore, whenever a suspicious primary breast cancer or suspected metastatic lesion is to be biopsied, a sample of approximately ¼ gm of pure tumor tissue should be stored in deep-freezer conditions. If the tumor is proved to be breast cancer, this tissue is then submitted for estrogen and progesterone receptor assays.

References

1. Kohail, N.M.; Elias, E.G.; El-Noweim, S.A.; *et al.* "A Multifactorial Analysis of Steroid Hormone Receptors in Stage I and II Breast Cancer." *Ann Surg* 201(1985):611–17.

2. Fisher, B.; Redmond, C.; Brown, A.; *et al.* "Treatment of Primary Breast Cancer with Chemotherapy and Tamoxifen." *N Engl J Med* 305(1981):1–6.

Tumor Conferences are held weekly on Fridays between 8–9 a.m. in Room N13E28 at the University of Maryland Hospital. This is an open meeting and physicians are welcome to attend. Physicians can present cases, but please call 528-5224 before Friday to obtain time of the schedule for your case(s) and bring the pathological slides with you.

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical System, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

E. GEORGE ELIAS **MD**
University of Maryland Surgical Oncology Program

The Pediatric Morning Report
The Johns Hopkins Children's Center

Rheumatic Fever

A six-year-old was admitted to the hospital for evaluation of a two-day history of fever, swollen knees, and the presence of a nonpruritic generalized rash. No recent history of drug ingestion or vaccine administration could be elicited. A diagnosis of rheumatic fever was considered, but nobody remembered the Jones' criteria. It has been a long time since the last child with rheumatic fever was seen here at Johns Hopkins. Off to the books.

The Jones' criteria (revised) for guidance in the diagnosis of rheumatic fever are:

Major Manifestations
- Carditis
- Polyarthritis
- Chorea
- Erythema marginatum
- Subcutaneous nodules

Minor Manifestations
- Clinical
  - Arthralgia
  - Fever
  - History of RF
- Laboratory
  - Prolonged P-R Interval
  - Acute phase Reactant
    - Sed rate
    - CRP
    - Leukocytosis

Supporting Evidence of Streptococcal Infection
- Increased titer of anti-streptococcal antibodies
- Positive throat culture
- Recent scarlet fever

The presence of two major criteria, or of one major and two minor criteria, indicates a high probability of acute rheumatic fever, if supported by evidence of preceding group A streptococcal infection.

Does this sound familiar? When all the facts were in, it turned out that this boy did indeed have acute rheumatic fever. (Jones, T.D. "Diagnosis of Rheumatic Fever." *JAMA* 126(1944):481.)

• • •

Relapsing Peripheral Facial Nerve Palsy

A boy, 12, had a two-day history of left-sided facial weakness of acute onset, acute swelling of the left side of the upper lip and upper cheek, and vague, abnormal taste on the left side of the tongue. Previous history revealed a similar episode that resolved spontaneously at age 8 years. The boy's father had three episodes of facial paralysis with spontaneous resolution. Both the father and grandfather had lingua plicata ("scrotal tongue" and not an Italian pasta dish). On physical exam, the patient had left lower motor neuron facial palsy, good facial tone, a fissured tongue, and edema of the left side of the lips. The remainder of the exam was normal. What did this patient have?

This boy represented an example of a rare condition known as the Melkersson-Rosenthal syndrome (MRS), a distinct head and neck disorder characterized by the triad of unilateral facial weakness of sudden onset, facial edema, and lingua plicata. It is familial and runs a relapsing course. The cause is unknown. The syndrome usually manifests itself in patients younger than 20 years old and should always be included in the differential diagnosis of idiopathic facial paralysis in children. There is usually no evidence of an accompanying systemic illness although migraine-type headaches may precede or accompany the attacks. Other less common manifestations include gingival and palatal swelling, trigeminal neuralgia, and psychotic episodes. No known therapy has been shown to be effective in treating these short-lived attacks. (Levenson, M.J. *et al. Arch Otolaryngol* 110(1984):540.)

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The Electric Birthday

On a slow day, Morning Report always can be enlivened by demonstrating how to use a small calculator's "memory" to retrieve the age, the day, and the month of a house officer's birth. The trick is done as follows:

1. Turn your back to the person with the calculator; then, tell him to enter the number of the month of his birth. (Use the customary numbering system—counting January as 1, February as 2, and so on.)
2. Tell him to multiply the number in the display by 100.
3. Tell him, then, to add the day of the month he was born to the number showing in the display.
4. Next, say to multiply that number in the display by 10.
5. Tell him to add 42.
6. Then tell him to multiply the display number by 10 again.
7. Tell him, then to subtract 87 from this total.
8. Next, say to add his current age to the total.
9. Finally, tell him to subtract 333 from the final total in the calculator display.

Now, trying to mask your gloating, tell him to take a good look at the calculator's readout. "The last two digits on the right are your age," you say. "The next two, moving left, give the day of the month you were born. And the next one or two digits, at the extreme left of the number, indicate the month you were born." The numbers will be absolutely correct.

How it works: The sequential steps will always give the right answer.

Why it works: Well, math fans might apply some elementary algebra to the problem. Think of the month, date and age as three two-digit numbers that may or may not have zero as the first digit: AB, CD, EF. Write that month, AB as 10A+B; the date, CD, as 10C+D;

From the Department of Pediatrics, Frank A. Oski MD, Chairman; Peter C. Rowe MD, Chief Resident in Pediatrics, Children's Medical and Surgical Center, and Linda Clark, Librarian, Department of Pediatrics, The Johns Hopkins School of Medicine.

and the age, EF, as 10E+F. We can now express all the sequential steps by the following horrendous formula: 10{10{100(10A+B) + (10C+D) +}42 − 87 + (10E+F) − 333, which reduces to 100000A + 10000B + 1000C + 100D + 10E + F. Now this expression is none other than a way of writing the six-digit number ABCDEF—the final number in the calculator readout. (Gardner M. *New York Times Magazine*, January 18, 1976, p. 71.)

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Area meetings and course announcements are listed each month under *Doctors Take Note*

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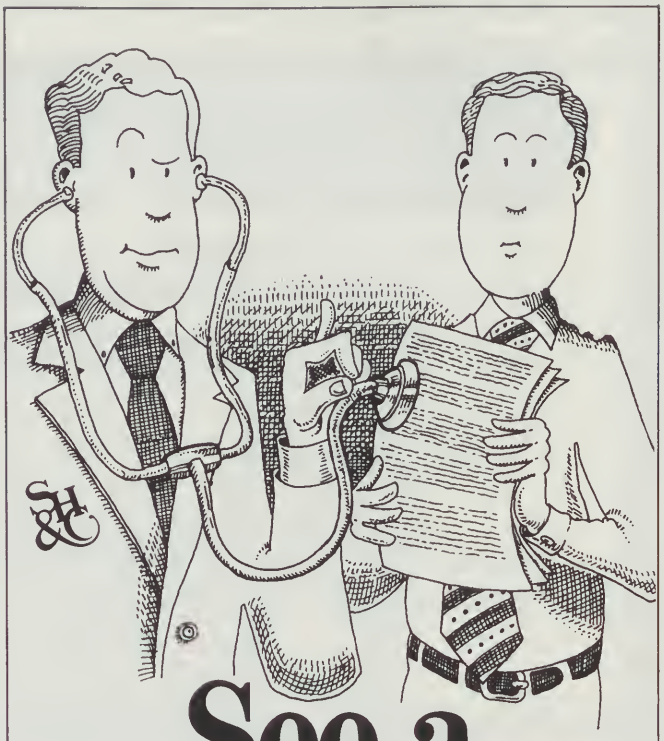
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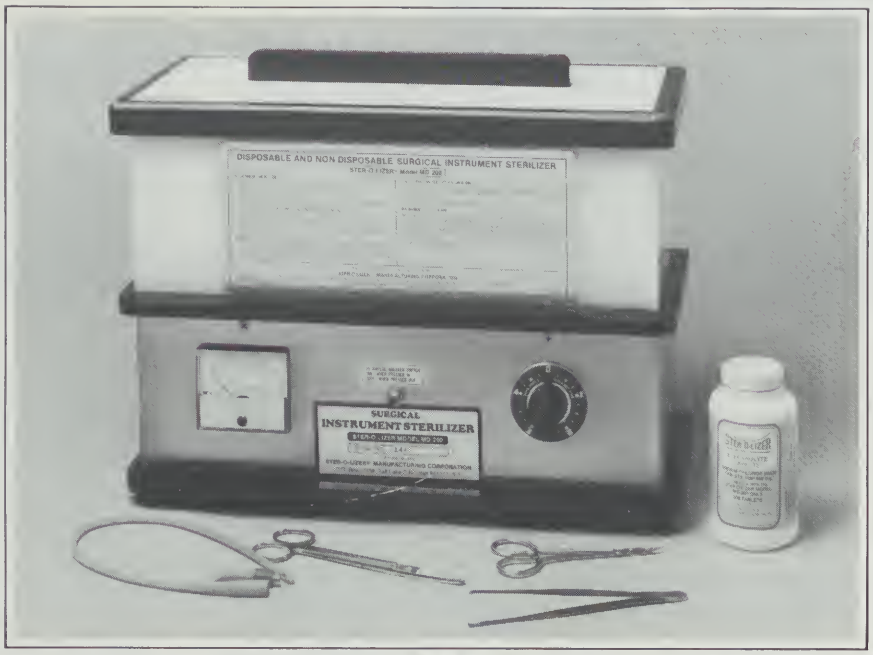
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Doctors Take Note

The Johns Hopkins Medical Institutions

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1986–87. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21206 (301-955-5880).

Dec 6 Fourteenth Annual Symposium on Geriatric Medicine, Francis Scott Key Medical Center. Fee: $65 physicians, $50 other health professionals, residents, and fellows; 7 AMA Cat I credits. Info: D. Heydinger, 301-955-6046.

Jan 16 Vascular Disorders of the Retina and Choroid. Fee: $185, $100 residents and fellows; 8 AMA Cat I credits. Info: D. Heydinger, 301-955-6046.

Mar 12–13 Positron Emission Tomography and the Chemistry of Mental Illness. Fee: $275, residents and fellows $175; 15 AMA Cat I credits. Info: P. Macedonia, 301-955-6085 or J. Buchanan, 301-955-8582.

Mar 23–24 Non-Occupational Exposure to Asbestos in Schools and Other Buildings: Risk Assessment and Management. Fee: $350, Johns Hopkins Health Associates $275; 12.5 AMA Cat I credits, 1.25 CEU, 2 ABIH. Info: J. Corn, 301-955-2609.

Apr 6–11 Pediatric Trends 1987. Fee: $500, residents and fellows $350; 45 AMA Cat I and 45 PREP American Academy of Pediatrics credits. Info: C. Sentman, 301-955-6085 or E.M. Sills MD, Park 207, Johns Hopkins Hospital, 600 N. Wolfe St., Baltimore, MD 21205.

May 22 Seventeenth Anniversary Meeting of the Retinal Vascular Center—Clinical Trials and the Practice of Ophthalmology. Fee: $190, residents and fellows $100. Info: D. Heydinger 301-955-6046.

Diagnostic Cytopathology for Pathologists, 1987 Postgraduate Institute: February to May 1987, subspecialty residency in Clinical Cytopathology, compressed into two courses, both of which must be taken:

Feb—Apr Home Study Course A—personal reading and microscopic study at own laboratory in preparation for Course B.

Apr 27–May 8 In-reisdence Course B—lecture series, laboratory study, and clinical experience at the Johns Hopkins Medical Institutions, Baltimore, MD, USA.

Designed solely for pathologists who are certified (or qualified for certification) by the American Board of Pathology or its international equivalent, this institute is an intensive refresher in all aspects of Clinical Cytopathology with time devoted to newer developments and techniques, special problems, and recent applications including *immunodiagnosis* and *needle aspiration.* Loan slide set with texts (Course A) will be sent each participant within the US and Canada for home study during Feb through Apr before Course B in Baltimore on April 27 to May 8. Participants *outside* the US and Canada must make arrangements to study Course A before Course B. *The entire course is given in English.*

Application and completed preregistration is advised ASAP: preregistration must be completed **before March 27, 1987**, unless by special arrangement. Info: John K. Frost MD, 604 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA.

The Department of Radiology and Radiological Science offers several courses in abdominal and obstetrical ultrasound: Courses scheduled 1/6/86–12/8/86. Info: J. Mosmiller 301-955-8450.

Basic Practicum Nov 17–21. Fee: $460; 40 AMA Cat I credits.

Visiting Physicians offered weekly throughout the year for experience in the lab and participation in reading sessions. By appointment. Fee $460; 40 AMA Cat I credits.

Continuously throughout the year. One-week Microsurgery Training Course. Basic technique and principles. 40 AMA Cat I credits. Info: Prog. Coord. 301-955-3169.

Johns Hopkins Medical Grand Rounds: audiocassettes, slides, and booklet. 30 topics and 40 AMA Cat I credits/year. Contact 301-955-3988, Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205.

Ophthalmic Electrophysiology Technician Training Course (ongoing 1-week course by appointment), The Wilmer Eye Institute, Baltimore. Info: C.M. Kearney.

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University of Maryland School of Medicine

CME Courses: For each course additional information may be obtained by contacting Program of Continuing Education, University of Maryland School of Medicine, Room 300, MSTF, 10 South Pine St., Baltimore, MD 21201 (301-528-3956).

Dec 4–5 Weight Disorders: Assessment and Therapeutic Options. Fee: $125; 12 AMA Cat I credits.

Dec 6 Computerizing Clinical Medical Records: A Practical Office System Using the PC. Fee: $275; 6 AMA Cat I credits.

Dec 17 The Menopause and Osteoporosis: A Clinical Update, International Hotel, BWI Airport, Fee: TBA; 5.5 AMA Cat I credits.

Mar 26–27 Third National Traumatic Brain Injury Symposium, sponsored by the Speech-Communication Disorders Program, MIEMSS, University of Maryland Medical System. Info: R. Schwartz, 301-528-6101.

Visiting Professor Programs—Directory of speakers and topics available for area hospitals and other health care organizations. An administrative fee is charged. Info: 301-528-3956.

Visiting Practitioner Preceptorships—Opportunity for physicians to participate in clinical situations in the University of Maryland Hospital. Requires approval from clinical department heads. Hour-for-hour AMA Cat I credits.

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Miscellaneous Meetings

Nov 18 The Glomerular Response to Renal Injury, C.W. Stewart Memorial Lecture at Maryland General Hospital. Speaker: Barry M. Brenner MD, Harvard Medical School. Info: 301-225-8790.

Nov 19 Panic Disorders, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

Nov 21 Diabetes Symposium, Suburban Hospital. Info: J. Reavis, Dept. of Medical Education, Suburban Hospital Association, 8600 Old Georgetown Road, Bethesda, MD 20814 (301-530-3100).

Nov 21–22 Regional Scientific Continuing Medical Education Meeting, American College of Physicians, Annapolis. Info: F.M. Calia MD, VA Medical Center, Medical Services (111), 3900 Loch Raven Blvd., Baltimore, MD 21218 (301-467-4824).

Dec 8–10 NIH Consensus Development Conference—Diet and Exercise in Noninsulin-Dependent Diabetes Mellitus, Warren Grant Magnuson Clinical Center, NIH, Bethesda. Info and registration: S. Feldman, Prospect Assoc., Ste 500, 1801 Rockville Pike, Rockville, MD 20853 (301-468-6555).

Dec 17 The Application of Bowen Family Systems Theory to Spouse Abuse, Taylor Manor Hospital. Info: Community Relations Office 301-465-3322 ext 212.

Jan 17 MAFP Mini Conference—Surgical Update for Family Physicians, Sheraton Inner Harbour, Baltimore. Info: John B. Umhau, Jr., MD, 1204 Maryland Ave., Baltimore, MD 21201 (301-659-0640).

Mar 28 MAFP Mini Conference—Cardiovascular Update for Family Physicians, Tidewater Inn Easton. Info: John B. Umhau, Jr., MD, 1204 Maryland Ave., Baltimore, MD 21201 (301-659-0640).

Apr 3–5 Ophthalmologic Plastic Surgery, Orbital Disease, and Neuro-ophthalmology, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $315. Info: K. Parrott, 804-786-0494.

Apr 10–12 Fifth Annual MCV Symposium: New Trends in Anesthesia, Medical College of Virginia CME Activity, Williamsburg Hilton. Fee: $275. Info: K. Martin, 804-786-0494.

Apr 10–12 Twenty-second Annual Pediatric Springfest, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $250. Info: K. Martin, 804-786-0494.

Apr 23–25 Twenty-third Annual Postgraduate Course in Radiology: The Chest, Medical College of Virginia CME Activity, Richmond Marriott. Fee: $325. Info: K. Parrott, 804-786-0494.

Apr 24–26 Ninth Annual Conference on Emergency Medicine for the Primary Care Physician, Medical College of Virginia CME Activity, Fort Magruder Inn and Conference Center. Fee: $295. Info: K. Martin, 804-786-0494.

Apr 24–26 Seventh Annual Clinical Concerns in Primary Care: Office Cardiology, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $295. Info: K. Martin, 804-786-0494.

May 8–10 Sixth Annual MCV Cardiology Conference, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $325. Info: K. Martin, 804-786-0494.

May 13–17 MAFP Annual Meeting and Scientific Sessions, Sheraton Fountainebleau Inn & Spa, Ocean City. Up to 30.5 AMA Cat I credits and up to 30.5 AAFP prescribed credits. Info: R. Bonsack MD, 301-659-0640.

May 18–19 Fourteenth Annual Hans Berger Day and EEG Symposium, Medical College of Virginia CME Activity, Baruch Auditorium, Egyptian Bldg., Medical College of Virginia Campus, Richmond, VA. Fee: $250. Info: K. Martin, 804-786-0494.

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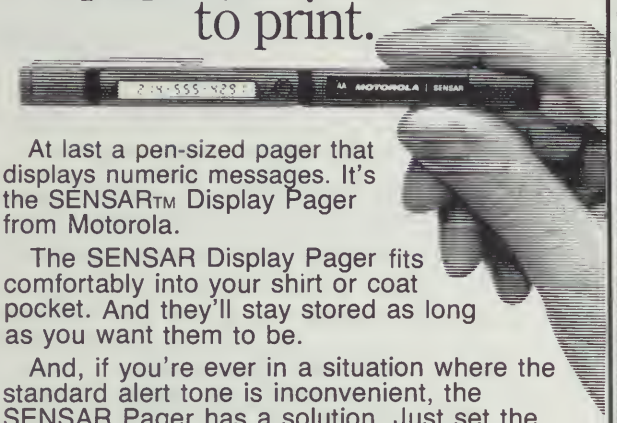
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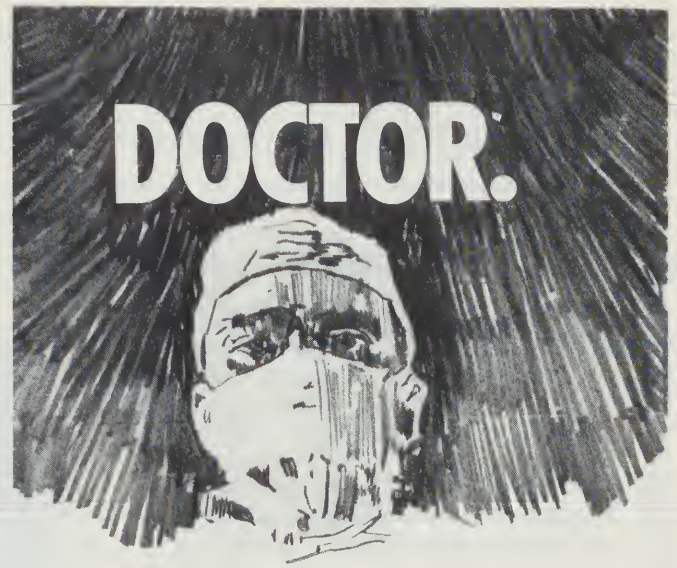
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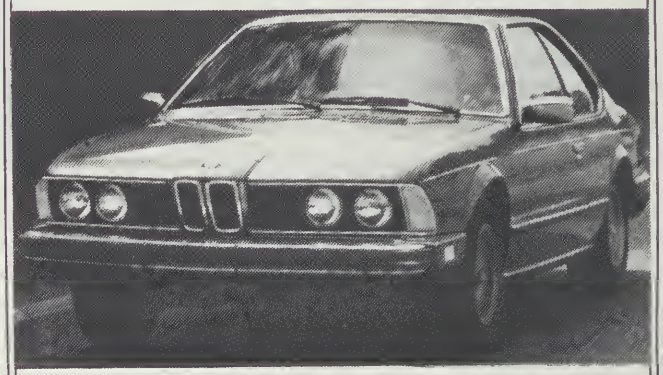
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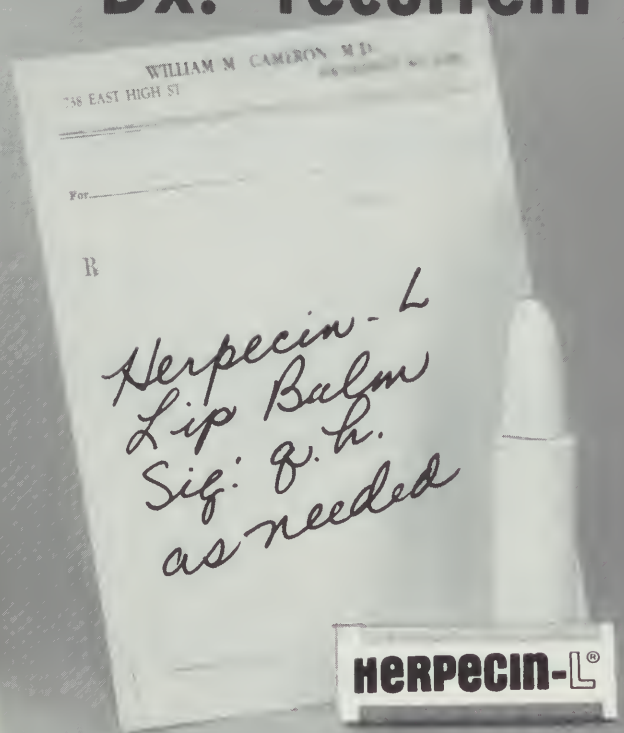


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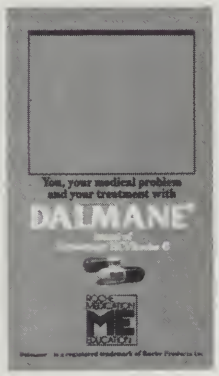
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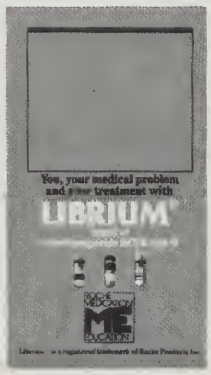
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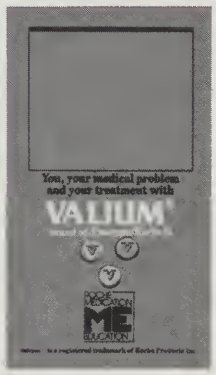
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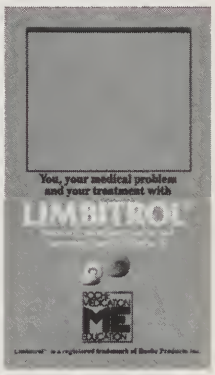
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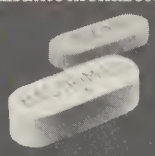
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On the cover: The Seal of the Medical and Chirurgical Faculty of the State of Maryland. The Greek inscription reads, in context, "When the need is for the dressing of wounds and the stilling of pain, one physician or surgeon is of *more value* than an army of *other men*." Iliad (Book 11, line 514), Homer, translated by Med-Chi's Librarian, J. Jense.

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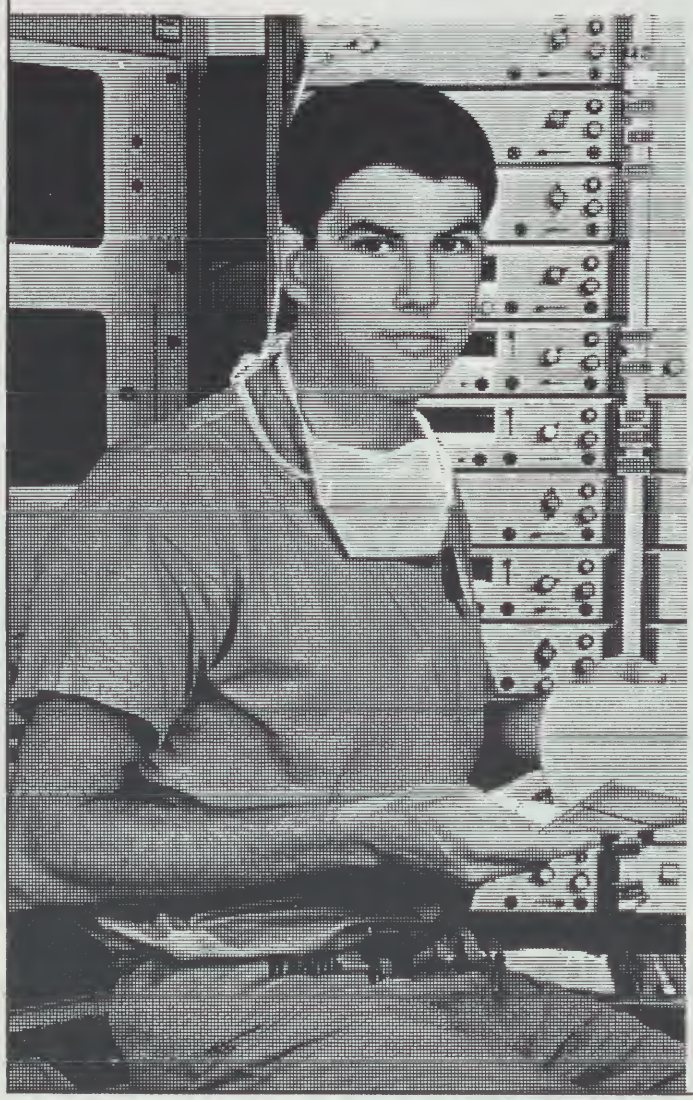
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Baltimore County Medical Association

Physician/Patient Communication

The Ethics Committee of the Baltimore County Medical Association had by the end of July more complaints from the public than in the entire previous year. In studying these cases, we find that the majority of complaints were due to a failure in communication between the physician and patient, threatening enough at times to lead to a malpractice suit. One of the tasks of the Ethics Committee is to avoid this, and out of our experience, we want you to attempt ways of improving your communication. Please keep the following in mind:

1. Do not just give the patient a diagnosis, handing him or her several prescriptions. Take the time to discuss your findings, spell out the risks and benefits of the treatment recommended. Explain to the patient possible options and do not fail to mention the possible side effects of any procedure or prescription. Do speak to the patient in a language he or she can understand and try to find in your approach a balance between reassurance and an honest assessment.
2. Do discuss the costs of the recommended procedures, and do not assume or intimate to the patient that the insurance will take care of it.
3. Give to your office staff the implicit instruction to avoid the same assumption so that they encourage the patient to check into their own particular coverage.
4. Consider using a printed fee schedule and printed explanations about your billing procedure.
5. As physicians we must be aware that a patient first of all consults you because he/she is in need of help but in our times of ever-increasing technology, this help often entails a cost that when not entirely covered by insurance might leave you with an angry patient. Frankness, understanding, and patience must be the way out of this dilemma.

H. MARGARET ZASSENHAUS MD
Chairman, Ethics Committee
Baltimore County Medical Association

Hotline Numbers for Impaired Professionals
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Letter to the Editor

Request for Info

For a book to be titled *Bringing Medicine to the Masses*, I am trying to locate any surviving medical or health-related motion pictures produced prior to 1928. I am particularly interested in finding films made for lay audiences on such topics as hygiene, nutrition, TB, VD, child care, eugenics, etc. I also would appreciate hearing from anyone who remembers seeing such films in school, in the Army, or in theaters before 1928 and from anyone who knows of specific references to such films in published or unpublished literature and documents from the pre-1928 period.

MARTIN S. PERNICK, Associate Professor
Department of History
The University of Michigan
Ann Arbor, MI 48109

Discipline Commission Action

In the Matter of Baker Hakki Adam MD Before the Commission on Medical Discipline

Notification of Termination of Probation and Reinstatement of Medical License

By Order dated May 29, 1984, the Commission on Medical Discipline (the Commission) found Baker Hakki Adam MD (the Respondent) guilty of violating Subsection 14-504(6) of the Health Occupations Article of the Annotated Code. The Commission suspended the medical license of the Respondent, but the suspension was immediately STAYED and Respondent placed on PROBATION subject to certain conditions (the Conditions of Probation). The Order further provided that if Dr. Adam complied satisfactorily with the Conditions of Probation, his license to practice medicine in the State of Maryland would be reinstated.

On August 19, 1986 the medical license of Baker Hakki Adam MD was reinstated in the State of Maryland without any conditions or restrictions whatsoever.

HILARY T. O'HERLIHY MD, Chairman
Commission on Medical Discipline

On instruction of the Council of the Medical and Chirurgical Faculty of the State of Maryland, "Findings of Fact, Conclusions of Law, and Order" will be published in the Maryland Medical Journal.

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Overcoming Barriers in Initiating Psychiatric Care for the Elderly

NANCY T. NICHOLS MD

Providing psychiatric care to elderly patients can be a gratifying experience for both patient and psychiatrist. Before such treatment can occur, however, one must understand and overcome the many barriers that prevent the elderly from obtaining such care. These barriers may be external and related to physical health and socioeconomic conditions or internal and related to self-image and societal ageism.

External barriers include the process of referral, the structure of the consultation, the patient's understanding of instructions, the home situation, and the specificity of follow-up arrangements. Elderly patients usually need to have specific arrangements made for referral. If given merely a name and telephone number, they may not follow through. The timing of appointments is important and should take into consideration the patient's situation. Patients may not be able to drive or to use public transportation. They may fear going out alone, and there may be limited times when a relative or friend is free to accompany them. The cost of medical care is a major barrier for the elderly, the majority of whom live on a fixed income, and their family doctor should instruct them that it is appropriate to discuss fees and insurance coverage with the consultant's secretary.

Other external barriers may arise in the structure of the consultation. Impairment of hearing can make information gathering time consuming; in such cases, ample time should be allowed. All possible information should be gathered directly from the patient, rather than from an accompanying person who may paint a distorted portrait of the patient.

When medication is prescribed, it is important to make sure the patient understands the instructions and, in the case of compromised hearing or sight, written instructions should be printed in large bold letters and given to the patient. In arthritic patients, scrip should be labeled "no child-proof cap." The purpose of the medication should be clearly explained as well as possible side effects.

Medications may be too strong or may interact with other medications prescribed by the family doctor and cause distressing side effects, such as confusion, dizziness, or somnolence. In such cases, a patient may stop the medication and refuse further treatment. The patient should be given small dosage initially and encouraged to call the psychiatrist if side-effects occur. The lag time of antipsychotics and antidepressants should be emphasized so the patient will continue to take medication in the absence of immediate improvement in symptoms.

Patients suffering from confusion or memory loss have problems in taking the right amount of medication. Some check on this can be kept by prescribing a nonrefillable two-week supply and asking the patient to bring the remaining medicine to his or her next appointment. If the patient lives with a competent and caring relative, that relative may be willing to monitor medication. For patients who live alone, visits from a nurse or social worker to explore reasons for noncompliance may be indicated. A definite follow-up appointment should be given, again with due consideration to the patient's schedule.

Many internal barriers to obtaining psychiatric care exist in the elderly and, indeed, in some psychiatrists. Both doctor and patient may be reluctant to introduce a stranger into their (often) long-standing relationship. For elderly patients there is still a stigma attached to mental illness. This is reinforced by a common fear that referral to a psychiatrist signifies they are "losing their mind" and will be institutionalized in a mental hospital or nursing home. They are often afraid that they will be rejected by the psychiatrist, for many elderly (infected themselves with the ageism of society) have little faith they can be helped or even are entitled to help. They have accepted the statement, "You have to expect this at your age."

In treating elderly patients, psychiatrists themselves often have to overcome the barriers of their own fears of aging and incapacity in order to fully believe that the skills of relating to the elderly are the same as in any other age group. Pessimism regarding prognosis and the right to treatment can be overcome by the same interest, optimism, and enthusiasm a psychiatrist shows toward younger patients. The elderly frequently are highly motivated to resolve both past and present conflicts and are extravagantly grateful for the relief of symptoms.

There are no stereotypical elderly; only human beings with unique and challenging problems.

Committee on Emotional Health, Gary W. Nyman MD, Chairman; Lino Covi MD, Editor.

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Alzheimer Disease. Meridian Healthcare is helping to do something about it.

As the largest provider of long-term nursing care in Maryland, Meridian Healthcare is in a unique position to exercise some leadership in developing new techniques for caring for Alzheimer victims. Even more important, we have made a commitment to actively assist with the search for a cure for this serious, terminal condition.

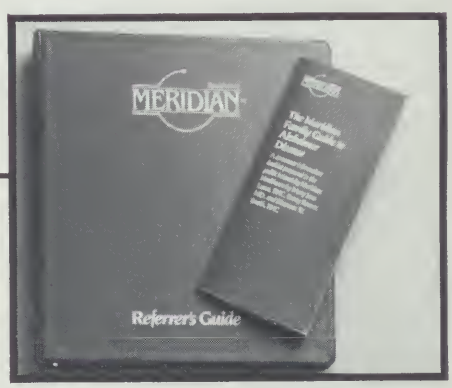
A specialty Alzheimer Disease Care Unit has been created at Meridian Nursing Center—Heritage in consultation with The Johns Hopkins University Medical Institutions to develop innovative approaches to care. To advance this research, Meridian funds an Alzheimer Disease Research Fellowship in The Johns Hopkins University Department of Psychiatry.

Alzheimer Disease is a little understood, even frightening facet of aging about which more public information is needed. To address this need, Meridian Healthcare has produced a booklet on Alzheimer. This guide will be offered free in commercial radio broadcast advertising as part of Meridian's continuing public information campaign.

Our concern with Alzheimer Disease is only one of many ways Meridian Healthcare is different. For more detailed information on our Alzheimer program or on any of our 13 Nursing Centers in Maryland, call or send the coupon for our free *Referrer's Guide*.

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DECEMBER 1986
NEW APPROVED IMMUNIZATION SCHEDULE FOR NORMAL INFANTS AND CHILDREN

The Immunization Practices Advisory Committee (ACIP) recently recommended that the DTP and OPV doses normally given at the 18-month visit now be given simultaneously with the MMR dose at the 15-month visit.

The ACIP further recommended, however, that administering MMR at 15 months and DTP-4 and OPV-3 at 18 months continues to be an acceptable alternative. Likewise, the American Academy of Pediatrics has advised that physicians look at this new schedule as an option for some children rather than a guideline for all children; the Department of Health and Mental Hygiene looks at it in the same way. The Department regards this new schedule as particularly appropriate in cases where children are behind in recommended immunizations and where there is good reason to believe an 18-month appointment may not be kept.

Recent studies have shown no differences in the safety or serologic response rate of the two vaccine schedules, and according to the Centers for Disease Control (CDC), implementation of the new vaccination schedule will result in at least three major benefits:

1. A decrease in the number of physician and other health care provider visits required for immunization during the second year of life;

2. An accompanying decrease in costs; and

3. An increase in the percentage of children who will be fully or partially immunized by 24 months of age.

SOURCE:
MMWR/September 19, 1986/Vol. 35/No. 37
AAP News/October 1986

NEW HORIZONS
ENTERICALLY TRANSMITTED NON-A, NON-B HEPATITIS

For the past 30 years, large epidemics of viral hepatitis have been reported from the Indian subcontinent and surrounding countries. These epidemics have primarily affected young adults, and a high mortality among pregnant women have been observed. The epidemics either occur as discrete common-source outbreaks related to consumption of contaminated water, or are prolonged over one or two years with marked peaks occurring during the monsoon rains. The disease is clinically similar to hepatitis A and B, but no chronic sequellae or carrier state has been found. The first well described outbreak occurred in New Delhi during 1955-1956 and involved about 29,000 reported cases (1). This outbreak was due to the contamination of a main water treatment plant by the effluent of a large sewage canal located nearby. Subsequent to the Delhi epidemic, large outbreaks have occurred in Ahmedabad, Kashmir and Siliguri in India, Kathmandu in Nepal, Rangoon and Mandala in Burma, and in the southern Soviet Union (2-5). In addition, reports of non-A, non-B epidemics have come from Algeria and other parts of North Africa (6).

Initially, these outbreaks were attributed to "infectious hepatitis." Hepatitis A virus (HAV) was shown to account for the "infectious" hepatitis outbreaks in the United States and Western Europe; consequently, it was assumed that the Asian outbreaks were also due to HAV. However, HAV produces lifelong immunity to reinfection, and virtually all persons in Southeast Asia become infected by HAV during childhood. Hence, it was difficult to explain how large epidemics of HAV could occur among Asian adults. When sensitive and specific tests become available for IgM-specific anti-HAV antibodies that are diagnostic for recent HAV infection, sera stored from the New Delhi and other outbreaks were found to be negative for recent HAV infection (7). The terms epidemic non-A, non-B hepatitis, waterborne non-A, non-B hepatitis, and fecal-oral non-A, non-B hepatitis have been used to decribe these outbreaks.

During interepidemic periods, non-A, non-B hepatitis appears to account for more than half of the "sporadic" or community-acquired hepatitis in adults in Southeast Asia (8). These sporadic cases have an age distribution similar to epidemic cases and usually occur with peaks during the monsoon season. The limited studies done on these patients suggest that neither chronic sequellae nor the carrier state occur after acute infection. Such patients have no history of parenteral exposure. Thus, these cases more closely resemble epidemic non-A, non-B hepatitis than the post-transfusion type that has been described in the United States and western Europe. It is likely that a proportion of sporadic non-A, non-B hepatitis in Asia is in fact due to the same etiologic agent as the epidemic strain. For this reason, we have chosen the term "enterically transmitted non-A, non-B hepatitis" to encompass both epidemic and sporadic forms.

Workers in the Soviet Union, India, and the United States have observed 27-nm virus-like particles in the stools of patients with both epidemic and sporadic non-A, non-B hepatitis (4,9). Primates inoculated with stool suspensions develop acute hepatitis diagnosed by both liver histology and enzyme elevations; they excrete viral particles in their stools that are morphologically identical to those in the stools of human patients, and they have developed antibodies capable of agglutinating the virus particles in stool. Work is now in progress to develop diagnostic tests for enterically transmitted non-A, non-B antigen in stools and antibody in acute- and convalecent-phase patient serum.

The CDC Hepatitis Branch is aware of several cases of probable enterically transmitted non-A, non-B hepatitis that have been imported into the United States during 1985. All cases have occurred in residents of Southeast Asian countries who arrived in the United States while incubating the disease, and no secondary spread has been recognized. Other cases have occurred in U.S. citizens abroad. At least two have been documented in U.S. citizens living in Nepal during the 1981-1982 epidemic in Kathmandu. Those patients had received immune globulin (Ig, gamma globulin) prepared in the United States to protect against hepatitis A (4). IG prepared in the United States should not be considered protective against enterically transmitted non-A, non-B hepatitis. The best protection is to avoid water and uncooked foods of uncertain purity, as should be done to prevent all enteric diseases when traveling in endemic areas.

The CDC Hepatitis Branch is very interested in receiving immediate notification of all cases of non-A, non-B hepatitis occurring in persons recently arriving from abroad, particularly from countries in Southeast Asia. Limited testing of acute-, and convalescent-phase serum specimens and stool for virus is available. Stool for immune electron microscopic examination should be obtained within 7 days of onset of symptoms and promptly frozen-preferably at -20°C or below. Specimens should only be sent after consultations with:

Dr. Dan Bradley	(404) 321-2335
Dr. Mark Kane	(404) 321-2346
Dr. Steve Hadler	(404) 321-2346
Dr. Hal Margolis	(404) 321-2335

References available upon request from the Assistant Directorate, Epidemiology and Disease Control.

SOURCE:

U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, HEPATITIS SURVEILLANCE, Report No. 50, March 1986.

MARYLAND AIDS UPDATE.. NOVEMBER 26, 1986

Assistant Directorate, Disease Control and Epidemiology
Division of AIDS Prevention
Maryland State DHMH 201 W. Preston Baltimore MD 20201 (301) 225-6707
AIDS Information and Referral Hotline 1-800-638-6252

MARYLAND AIDS STATISTICAL UPDATE

I. Cases by place of residence and vital status

	SINCE JAN1, 1986		CUMULATIVE	
	Cases	Deaths	Cases	Deaths
Baltimore City	74	26	177	105
Baltimore County	7	4	25	18
Suburban Baltimore counties:				
Anne Arundel, Carroll, Harford, Howard	10	3	34	20
Metro Baltimore subtotal:	91	33	236	143
Suburban DC counties:				
Montgomery	33	3	73	32
Prince George's	29	10	105	71
Calvert, Charles, Frederick, St. Mary's	5	3	11	6
Metro DC (MD) subtotal:	67	16	189	109
Eastern Shore subtotal:	6	2	19	14
Western MD subtotal:	3	1	8	5
MD total:	167	52	452	271

	Cases	Deaths
Washington, D.C.	507	304
Virginia suburbs	172	79
Maryland suburbs	189	109
Metro D.C. total:	868	492
National: (CDC data as of 11/24/86)	28,169	15,815

	SINCE JAN1, 1986		CUMULATIVE	
	Cases	Percent	Cases	Percent
II. SEX				
Male	154	92.2	416	92.0
Female	13	7.8	36	8.0
Total	167	100.0	452	100.0
III. RACE				
White	83	49.7	208	46.0
Black	75	44.9	226	50.0
Hispanic	7	4.2	16	3.5
Other	2	1.2	2	0.5
Total	167	100.0	452	100.0
IV. AGE				
0-12	4	2.4	7	1.5
13-19	0	0.0	1	0.2
20-29	22	13.2	77	17.0
30-39	71	42.5	200	44.3
40-49	41	24.5	98	21.7
50 +	29	17.4	69	15.3
Total	167	100.0	452	100.0
V. DISEASE				
Kaposi's Sarcoma	7	4.2	41	9.1
P. carinii pneumonia	117	70.1	277	61.3
Both KS and PCP	5	3.0	17	3.7
Other Opportunistic Infections	38	22.7	117	25.9
Total	167	100.0	452	100.0

VI. BY YEAR OF DIAGNOSIS

	CASES	DEATHS (%)
1981-1982	9	9 (100)
1983	32	28 (88)
1984	79	68 (86)
1985	165	114 (69)
1986 ytd	167	52 (31)
Total	452	271 (60)

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Executive Director's Newsletter

December 1986

BLUE CROSS BLUE SHIELD MAJOR MEDICAL POLICY

Effective immediately, all participating providers may collect the deductible and copayment amounts at the time of patient visits. This change to the recently announced policy of Blue Cross and Blue was accomplished through a mutual understanding of the impact such a policy would have had on primarily office-based physicians. Med-Chi is especially grateful for the efforts of Raymond Atkins MD, Med-Chi's Secretary and liaison between the Executive Committee, and Michael Murray, Med-Chi's Director of Operations. Appreciation is also extended to the following physicians who worked with Med-Chi on this issue: Aristides Alevistados, Louis Olsen, and Betty Robinson as well as those physicians who corresponded with BC/BS explaining the negative impact the original policy would have had on their practices.

All physicians will receive written notification from BC/BS officially announcing this change. Other aspects of the policy remain in force including no-balance billing between actual charges and allowed payment levels.

DUES DEDUCTIBILITY

Under the Tax Reform Act of 1986, most physicians' membership dues are still tax deductible either as a business expense or as a miscellaneous itemized deduction. Physicians conducting business through sole proprietorship, partnership, or "Subchapter S" corporation, may still deduct dues in their entirety as a business expense. Incorporated physicians or physicians employed by a corporation should have the corporation pay the dues, because the corporation may still deduct the dues in their entirety as a business expense. Effective January 1, 1987, employed physicians who pay their own dues may deduct the dues only insofar as the dues plus other miscellaneous itemized deductions exceed 2% of Adjusted Gross Income.

PAC contributions qualify for tax credit in 1986, but the tax credit for all political contributions, including PAC dues is repealed effective January 1, 1987. Physicians should pay PAC dues before December 31, 1986 to receive the final tax credit. Check with your own tax advisors regarding specific tax circumstances.

DUES BILLS

The 1987 dues notices were mailed the last week of November. In light of the tax changes, members may wish to pay their 1987 dues in 1986. In order to qualify for physicians defense panels, dues must be paid by January 31, 1987.

RESOLUTIONS DEADLINE

Resolutions to be considered by the House of Delegates at its Annual Meeting on Friday, May 1, 1987 must be received in the Faculty office by FRIDAY, MARCH 6, 1987.

MEDICARE REIMBURSEMENT

The current freeze on actual charges of nonparticipating physicians expires on December 31, 1986. Participating and nonparticipating physicians will be provided an equal update of 3.2% in Medicare prevailing charges beginning on January 1, 1987.

Under what is described as a "fee-screen" method, prevailing charges for nonparticipating physicians will be set at 96% of the prevailing charge levels allowed participating physicians. Under this system, increases in nonparticipating physician charges will be limited. At the beginning of each year, Medicare carriers are required to provide each nonparticipating physician with a list of the maximum allowable actual charges for the year. Medicare carriers are required to pay 95% of clean claims within an applicable number of calendar days. More information may be obtained from the Faculty office.

MMPAC CANDIDATE SUPPORT

The General Election on November 4 resulted in a high rate of success by the Maryland Medical Political Action Committee (MMPAC). In congressional races, 100% of the candidates supported by MMPAC were successful.

MMPAC also contributed to the campaigns of 132 candidates for the General Assembly, of which 81% prevailed in the general election. The bipartisan focus of MMPAC was demonstrated by contributions to 92 Democrats and 25 Republicans.

Contributions to both MMPAC and AMPAC are an excellent way for you to become involved in the political process. I urge your continued support for these organizations during the coming year.

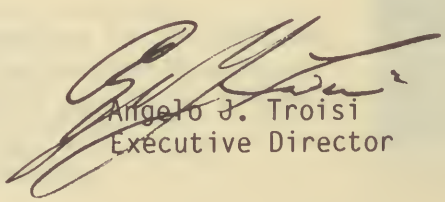
SENATE BILL 830

Senate Bill 830, which authorizes physicians to dispense prescription medication from their offices, goes into effect on January 1, 1987. This does NOT effect the long-standing practice of providing sample or starter dosages.

The bill requires dispensing physicians to register with the Board of Medical Examiners with demonstration to the Board that proposed dispensing practices are in the public interest. There are also labeling and record-keeping requirements. The Faculty is working with the Board to develop regulations for implementing the bill.

ANNUAL MEETING

The 189th Annual Meeting of the Faculty will be held Wednesday, Thursday, Friday, April 29, 30, and May 1, 1987 at the Omni International Hotel in downtown Baltimore. Watch your mail for an advance program of the meeting.



Angelo J. Troisi
Executive Director



ANGELO J. TROISI
Executive Director
Medical and Chirurgical Faculty of Maryland

Angelo J. Troisi, former Executive Director of the Prince George's County Medical Society, was appointed Executive Director of the Medical and Chirurgical Faculty of Maryland on September 27, 1986. Troisi is only the second person to be chief administrator of the affairs of the Faculty. He succeeds John Sargeant who served as Executive Director from 1958 until his death on November 25, 1985.

Troisi has a strong and varied background in numerous facets of health care administration including Executive Director of the Maryland Society of Eye Physicians and Surgeons, chief executive officer of various size hospitals, and Assistant Professor in the postgraduate program of health care administration at Baylor University in Texas. In addition he has extensive administrative experience with medical services in the military. Since 1981, he has been a preceptor in the graduate program of health care administration at George Washington University.

Troisi has a bachelor's degree in General Education from the University of Nebraska and a master's degree in Hospital Administration from Baylor University. He is a fellow of the American College of Health Care Executives, former Chairman of the Board and current member of both the Southern Maryland Health Systems Agency and the Metropolitan Washington Council of Health Planning Agencies, as well as former Chairman of the Board of the Bowie Health Center.

Born in Raritan, NJ, Troisi resides in Bowie, with his wife Terry Ann and their three children, Mark John, Matthew Stephen, and Noelle Ann.

SB 560—Medical Malpractice: Peer Review and Risk Management

With the support of Med-Chi, the 1986 General Assembly enacted one of the most comprehensive physician discipline laws in the country. Legislators and physicians alike were troubled by the lack of a coordinated mechanism for evaluating all disciplinary and tort actions initiated against a physician. While hospitals, county and state medical societies, the courts and the Commission on Medical Discipline all were involved in evaluation of physician competence, no single agency had a complete record.

SB 560 of 1986 establishes the Commission on Medical Discipline as the central repository for all actions brought against a Maryland licensed physician. When completely implemented (probably by 1988) the Commission will have on file the following information about a physician:

- Any complaint brought by an individual against a physician arising at the state agency, county, or state medical society.
- Any malpractice action filed with Health Claims Arbitration.
- Any change, reduction, limitation, dismissal, or denial of a physician's hospital privileges for reasons that are a cause for discipline in Maryland.
- Any similar action taken against a physician in a residency training program.
- Any similar action taken against a physician by a nursing home, kidney disease treatment facility, ambulatory surgical facility, inpatient rehabilitation facility, hospice, or home health agency.
- Any settlement made on behalf of a physician by a casualty insurer writing medical professional liability insurance in Maryland.

In addition to collecting the information, the Commission is required to report actions taken against a physician to all hospitals and health care facilities where that physician has privileges if the Commission determines the institutions should be informed, if there is a reasonable possibility of an imminent threat to patient safety. Notification of all HCAO filings will be sent to hospitals and health care facilities.

All formal actions of the Commission against a physician will be disseminated to all hospitals and health care facilities where the physician has privileges.

Hospitals will be required as a condition for licensure to institute formal credentialing requirements that will include analysis of the foregoing information collected about a physician, review of clinical skills, compliance with continuing medical education requirements, and physical and mental status. Each hospital is required to establish a multifaceted risk-management program.

Initial implementation of the legislation began the first week of November. Med-Chi, under contract with the Commission on Medical Discipline, has established contact with all licensed Maryland hospitals and has begun to computerize the data. Although formal regulations will be written outlining specific procedures, the bill is self-implementing.

The confidentiality laws that apply to all phases of physician discipline also apply to SB 560. All reports made to the Commission are confidential until and unless formal action is taken. All persons who are involved with physician review are protected.

When the Commission has the equipment and the staff to handle the program, the Faculty will transfer its activity to the Commission. Individual questions concerning the program can be directed to Joseph E. Jensen at the Faculty office.

ELZA DAVIS **CAE**

A registration statement relating to these securities has been filed with the Securities and Exchange Commission but has not yet become effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This advertisement shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

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One Minute with Diabetes

Overprotecting Children with Health Problems

Doctor, my ten-year-old son has had diabetes for three years and will neither give himself insulin nor attempt to follow his meal plan. I keep telling him he will have serious complications if he does not take care of himself, but he does not listen. He has been in the hospital three times in the past year because of ketoacidosis and vomiting. He wants a bicycle, which I will not get him because bikes are too dangerous for diabetic children to ride. He should listen to me. What can I do?

Parent-child situations related to a health problem of the child are common whether the problem is rheumatic heart disease, asthma, diabetes, or whatever. The parent tends to be overprotective to the point of preventing the child's normal development. Certainly a ten-year-old diabetic child should be permitted to have a bicycle, go swimming, play ball, and participate in normal activities for his or her age group.

In this family situation, which is not an uncommon one, some means needs to be developed for the parents to better understand diabetes and child development. This might be done through counseling, diabetes education courses, or diabetes camps.

Here in Maryland, we are fortunate to have Camp Glyndon for Diabetic Children. The camp takes diabetic children in age groups: 5 to 6 years, 7 to 9 years, 10 to 12 years, and 13 to 15 years. The one to two week camp periods are held in the summer months. There is a charge for the sessions, but camperships are available for families in financial need. The phone number for information is 301-486-5515, or write to The American Diabetes Association, Maryland Affiliate, 3701 Old Court Road, Suite 20, Baltimore, MD 21208. The camp prides itself that every child finishing camp is willing to do self-testing and self-administration of insulin. Everyone participates in swimming, tennis, and other sports. It is reassuring for a diabetic child to be in a living situation where 200 other children of the same age have the same problem. Peer pressure makes a child compete and not use diabetes as a crutch.

It is also helpful for the parents to be separated from the children. They learn that the children's physical and emotional capabilities will develop normally if permitted to do so. It would be a wonderful and worthwhile experience for all diabetic children to attend a session of diabetic camp at least once.

Whether diabetic children can attend other camps, such as church or scout camp, will depend upon the knowledge and skill of the children in managing their problem and the willingness of the camp to accept them. Certainly if the children are capable and the camp accepts them, such camping is a part of normal living and should be entered into. When a physician becomes aware of a family situation such as the one described here, where the child may be using ketoacidosis and hospital admission as a means of controlling his or her parents, some direct form of intervention is mandatory to prevent serious injury to the child's health.

DeWITT E. DeLAWTER, MD
Editor

January 1987 in MMJ:

Sexually Transmitted Diseases: New Fronts in an Old Battle

Presented by the Center for Health Education in cooperation with Med-Chi's ad hoc Policy Advisory Committee on AIDS, this issue will provide the most current information on the extensive health hazards associated with sexually transmitted diseases. Fourteen articles have been compiled to improve understanding of these diseases and to allay physician concerns associated with the diagnosis, treatment, and care of individuals who may have a sexually transmitted disease. The articles underscore the need for compassion not only for those with disease but also for those who are concerned about acquiring a sexually transmitted disease.

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Management of Local Skin Recurrences

It is not uncommon for some malignant skin tumors to recur locally without evidence of distant metastasis. It is estimated that 5 percent of breast cancers and cutaneous melanomas recur locally in the skin after definitive surgery, that is, mastectomy and wide excision respectively.

When local recurrence is suspected, two approaches are to be carried out: (1) The skin lesion is biopsied to document the recurrence histopathologically and to rule out other unrelated lesions such as benign ones or a different type of malignancy. (2) If the lesion is malignant, the patient should undergo a complete work-up to exclude distant metastasis, since recurrences may be part of or accompanied by widespread disease. The work-up should include a complete blood count with differential and actual platelet count to rule out suppression of one of the blood elements that makes it suspicious for bone marrow invasion; if this is suspected, bone marrow aspiration or even biopsy is in order as are prothrombin time (PT), partial thromboplastin time (PTT), blood chemistries including serum calcium, liver function tests, especially serum alkaline phosphatase, chest x-ray, bone and liver scans. Serum lactic dehydrogenase (LDH) is of greatest value only in patients with melanoma, as its rise indicates visceral metastasis. Only when such work-up reveals no distant metastasis is the patient declared to have local recurrence.

Breast carcinomas that recur locally usually are treated by radiation therapy to the chest wall. This has proved to be very effective. However, if the disease fails to respond to irradiation or recurs after radiation therapy, wide surgical resections (which may require skin grafts or systemic chemotherapy or hormonal therapy) are required to control the disease.

Cutaneous melanomas may recur locally or the patient may develop localized satellitosis, that is, metastasis in the intradermal lymphatics in the area, after wide excision of the primary. This usually is managed by reexcisions with safe margins. Occasionally, radiation therapy is added with questionable (if not useless) results. While hyperthermic perfusion of an extremity is applicable to local recurrences in limbs, recurrences in the scalp, forehead, and torso are not amenable to such therapy. Multiple scalp and/or forehead lesions usually are not manageable by repeated surgical excisions, and systemic chemotherapy, although limited in this disease, must be used before there is evidence of distant metastasis.

Morton reported on the use of bacillus Calmette-Guerin (BCG) in the management of cutaneous melanoma.* When BCG is injected intralesionally it causes an inflammatory reaction: erythema, induration, and ulceration at the injection site. When such reaction subsides, the tumor disappears. This could be due either to the inflammatory reaction or to an immune reaction that results in tumor rejection. Morton also noted that some of the lesions near the injection sites but not injected also disappeared. This raises the probability that the disappearance of these tumor nodules is due to an immune reaction rather than an inflammatory one.

Based on these findings, we have used intralesional injection of BCG in the management of small, local, multiple recurrences of melanoma and breast carcinoma as well as in minimal satellitosis with excellent results. However, on one occasion of local skin recurrence from breast carcinoma that failed to respond to radiation therapy, intralesional injection of BCG resulted in massive tissue slough and exposure of a rib as well as persistent skin ulceration and drainage in the middle of an irradiated field.

Since 1978, we have used a different approach: patients with local skin tumor recurrences are given an intradermal injection of BCG, at any site in the body and not necessarily at a tumor site, to create a *strong* purified protein derivative (PPD)-positive skin reaction. Two to three weeks later, the patient is skin tested using second strength PPD 250 TU. When there is a strong skin reaction to PPD, all the lesions are injected with PPD 250 TU. The injection must be intralesional, and the amount injected must be sufficient to fill the lesion. This results in a delayed hypersensitivity skin reaction to the PPD intralesionally. Redness, induration, and itching may last two to four days. Biopsies taken at that time reveal massive infiltration of the lesions by mononucleated cells. Three to four weeks later, the tumor nodules will completely or partially disappear. We do not exceed a total dose of 1 ml of PPD injections per treatment. If any tumor is left, it can be injected with PPD 250 TU three or four weeks later and this can be repeated until all lesions completely disappear. If and when new skin lesions develop, intralesional injection of PPD can be used as long as the patient shows *strong* PPD skin reaction. This approach should be postponed in patients who have low white cell count due to bone marrow suppression (for example, from chemotherapy) until they are fully recovered. While PPD skin reactions are much milder than BCG reactions and it can be safely given in irradiated areas, caution should be exercised when injecting skin lesions near the eyes. If the patient is immune suppressed, there will be a weak or negative reaction to skin testing with PPD two to three weeks after BCG injection. Such a patient is not a candidate for intralesional injection of PPD.

Finally, although such an approach has an excellent control of local recurrences, it may not have much of a systemic effect if applied later, as some of these patients

---

If you have any questions, call or write the Surgical Oncology Program at the University of Maryland Medical Systems, Room N13E02, Baltimore, Maryland 21201 (301-528-5224).

develop systemic metastasis one to two years later while having good local control.

Tumor Conferences are held weekly on Fridays between 8 and 9 am in Room N13E28 at the University of Maryland Hospital. Physicians are welcome to attend this open meeting. Physicians can present cases; please call 528-5224 before Friday to obtain time on the schedule for your case(s), and bring the pathological slides with you.

E. GEORGE ELIAS **MD**
University of Maryland
Surgical Oncology Program

* Morton, D.L.; Eilbert, F.R.; Malmgren, R.A.; Wood, W.C. "Immunological factors which Influence Response to Immunotherapy in Malignant Melanoma." *Surgery* 68 (1970):158–64.

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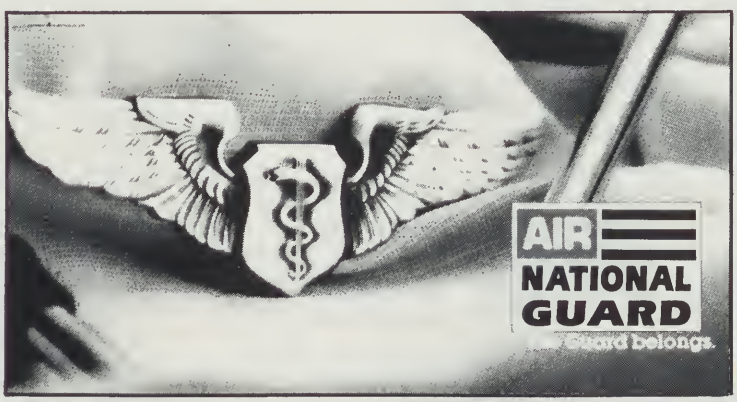
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Smoking Part III: Two Minutes of Your Time: A Guide to Helping Your Patients to Stop Smoking

CAROL S. HAINES MD, CAROL LEWIS ScD, and EDNA C. AMADOR MA

To augment two previous articles on smoking, we present a physicians' guide to help patients stop smoking. This includes practical and specific suggestions, a suggested "script," and sources of printed materials to reinforce your instructions.

Carol S. Haines MD is Chief, Division of Cancer Control, Department of Health and Mental Hygiene; Carol Lewis ScD is Executive Director and Edna C. Amador MA is former Assistant Director of the Maryland Commission on High Blood Pressure and Related Cardiovascular Risk Factors.

Who Smokes In Maryland?

There are 1.2 million smokers in Maryland; 34 percent of adults smoke. Smoking rates for blacks are higher than for whites with one exception: black and white women 50 and over are least likely of any group to smoke. Smoking is more common among black men of all ages (about 47 percent smoke) than in any other group; young black women (under 50) have a smoking rate of 42 percent, compared with 37 percent in younger white women. *Over one quarter of persons with hypertension smoke* and therefore have at least two major risk factors for cardiovascular disease.[1]

The Physician's Influence and Authority

Over 90 percent of Maryland adults report they have seen a physician in the last year. As previously pointed out in *Commentary*, health care professionals underestimate the impact they can have on patients' smoking behavior.[2] Multiple studies on three continents have shown that **two minutes of your time can have an impact on the smoking behavior of some of your patients.**[3] As a physician you can influence your patients who smoke by:

- **advising** them that their health will benefit by quitting
- **dispensing** a pamphlet (suggestions follow)
- **negotiating** a target quit date (this may be delegated to your staff
- **reviewing** the patients' success in carrying out the specific behaviors you have **prescribed**

Advice to quit smoking should be offered to every smoker, every visit. Make certain that there is **no smoking** in your waiting room or elsewhere in your offices. Post "Thank you for not smoking" desk signs and posters; call your local American Heart Association-Maryland Affiliate, Inc. (301-685-7074), the American Lung Association (800-492-7527), or the National Cancer Institute (800-4-CANCER) to obtain these.

How Many People Can You Influence?

IF
- direct patient care takes 32 hours a week in your practice, and
- you see four patients an hour, and
- about a third of your patients smoke,

THEN
- you have 40 smoking patients eligible to receive two minutes of direct and unambiguous counseling.

IF
- they have, conservatively, a "quit rate" of 10 percent,

THEN
- you will help four patients each week (and 200 each year) to quit and to improve their health status.

IF
- a thousand other physicians in Maryland make a similar effort and sustain it throughout 1987,

THEN
- Maryland will have 200,000 less smokers by 1988.

A Suggested Script

What To Do	What to Say (delivered in a firm, caring manner)
Be matter of fact	• (*Patient's* name), you have smoked ____ packs a day for ____ years now. That's too much. You and I know you need to stop smoking, but • that will require a lot of effort and attention on your part.
Emphasize benefits	• But I'm confident your health will benefit when you succeed in quitting; you probably know of other benefits you'd enjoy such as extra spending money and feeling more energetic.
Request action steps that don't discourage or threaten	• I'm going to ask you to do some things to get ready to quit. (a) Will you take this brochure home and read it? (give pamphlet) (b) Will you tell at least two people who care about you that you have received medical advice to quit? Who? (Note in chart)

Educate about quitting	• To quit smoking, you need to select a special day—like moving or going back to school—for which you plan ahead. Would you like to quit on a weekday or a weekend?
Negotiate a quit date	• Can you choose a specific date within the next two weeks? (Note in chart)

A printed 'prescription blank' or rubber stamp may be prepared to put in the patient's chart (Figure); this may be filled out by office staff and the patient.

Pitfalls to Avoid

The effectiveness of advising will be diminished if you are perceived as scolding, nagging, or joking.

The advising cannot be accomplished in two minutes if you get into a struggle with the patient as he/she presents reasons "why it won't work." Instead, acknowledge the patient's worry with a nod of your head and reply compassionately, "I want you to know how concerned I am that you smoke." Then continue with the suggested script.

The advising cannot be accomplished in two minutes if you offer **your** motivation for advising (clinical and epidemiologic facts) as a motivation for the smoker to quit. Firm, emphatic concern, a one-sentence recitation of benefits, and an action plan take less than two minutes—and they **do** motivate.

Dr. John A. Smith, M.D.

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I AGREE TO:

___ Read *Quit for Good*

___ Tell people at home and work that Dr. Smith wants me to stop smoking.

THESE ARE THE STEPS I'M READY TO TAKE:

___ Buy only by the pack

___ Switch brands every pack

___ Wait until ___ A.M. to have my first smoke

___ Write down every cigarette I smoke

I'M QUITTING. MY QUIT DATE IS: _____

_____

Smoker's Signature

_____ M.D.

Figure. Example of a contract for specific steps leading to smoking cessation.

Printed Materials

Waiting-room literature has very limited impact on smoking behavior. In contrast, **dispensing advice** and **giving a pamphlet** may yield quit rates as high as 7 to 15 percent.[3] **When a quit date is negotiated**, these rates double.[4] Select materials you and your staff will dispense **personally** to your smoking patients and devise a method for having them available. For example, the person who takes vital signs could be responsible for taking a smoking history and attaching a printed guide to the chart for your use in advising the patient.

One excellent office aid is the *Quit for Good* series.[5] This series, produced by the National Cancer Institute, is available to physicians without charge through its Office of Cancer Communications (Room 10-A-18, National Cancer Institute, Bethesda, MD 20205; (800-4-CANCER). These are available without cost, in boxes of 50; two pamphlets, *Quit It* and *For Good*, require assembling in a folder. Included in each box are "No Smoking" posters and six "tent cards" to be placed on tables, desks, etc. An additional useful source of information and materials about smoking and smoking cessation is the US Public Health Service's Office on Smoking and Health (Room 110 Park Building, 5600 Fishers Lane, Rockville, MD 20857; (301-443-5287 or 301-443-1690).

Various smoking cessation brochures are also available at nominal cost from local offices of the American Lung Association, the American Heart Association, and the American Cancer Society.

Referral Sources

As a physician, the most important and influential thing you can do about stopping smoking is to talk to your patients yourself. No referral outside of your office will provide as much result with a small effort. However, if your patient feels he or she needs more help outside of your office, support joining a smoking-cessation group. Almost all smoking-cessation programs, regardless of whether they're public, voluntary, or for profit, have similar results: they attract similar highly-motivated populations and have similar quit rates at three, six, and twelve months.

The local American Cancer Society has educational programs for the public and a series of group sessions on smoking cessation. The local American Lung Association offers smoking-cessation programs, a home videocassette with viewers' guide, a set of self-help "quit-smoking" manuals, and local exsmokers support groups.

Nicotine Chewing Gum

Nicotine chewing gum, available for a number of years in Europe and Canada, was approved in 1984 for marketing as a prescription drug in the United States. It is important to understand, however, that the gum is not intended for use by continuing smokers who hope that the nicotine substitution will induce either a ces-

sation attempt or a reduction in smoking; rather, it is to be used as an aid for maintaining smoking cessation once the patient has made the cessation decision and committed himself/herself to that decision. Thus, the physician must still engage in persuasion and motivation and in the selection/prescription of a quit date.[5]

New Booklet for Physicians

For information about clinical opportunities for smoking intervention write to: The National Heart, Lung, and Blood Institute; Smoking Education Program; National Institutes of Health; Building 31, Room 4A-18; Department G-22; Bethesda, MD 20892. Please provide your specialty, as well as name and address.

In the next *HBP Commentary* we will discuss **maintenance** of smoking cessation, including nonpharmacologic and pharmacologic aids, and the issue of weight gain following cessation of smoking.

References

1. *Maryland Statewide Household Survey*, 1981–1982. University of Maryland, Department of Epidemiology and Preventive Medicine.
2. Prince, D.S. and Terry, P.B. "Smoking, Part II: The Physician's Impact on Smoking Behaviors." *MMJ* 35(1986):741–43.
3. Pederson, L.L. "Compliance with Physician Advice to Quit Smoking: A Review of the Literature. *Prev Med* 11(1982):71–84.
4. Ewart, C.K.; Li, V.C.; and Coates, T.J. "Increasing Physicians' Antismoking Influence by Applying an Inexpensive Feedback Technique. *J Med Ed* 58(1983):468–76.
5. Barker, L.R.; Burton, J.R. and Zieve, P.D. "Tobacco Use and Dependence," Ch. 20, pp. 234-44. In *Principles of Ambulatory Medicine*, 2nd ed. Baltimore: Williams & Wilkins, 1986.

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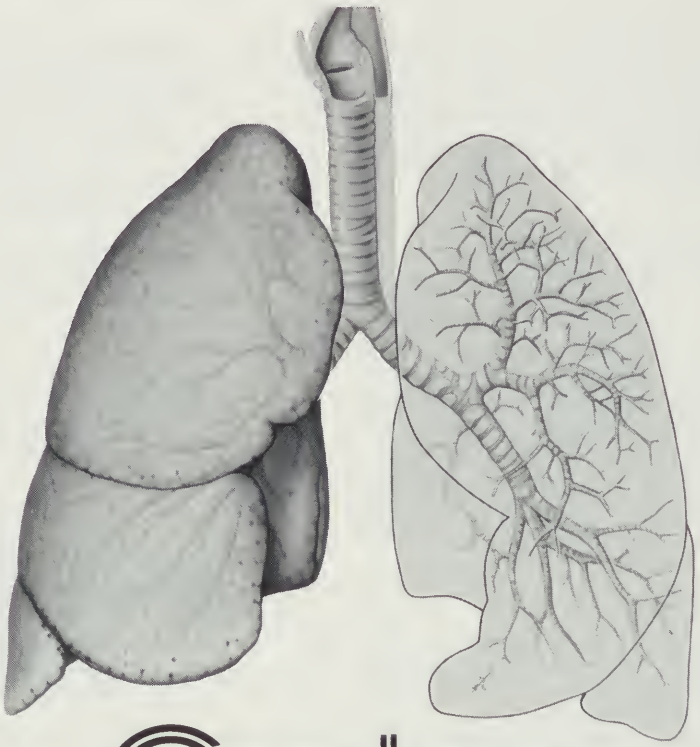
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- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
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As Others See Us

BERNARD R. SHOCHET MD

The task of the physician is to understand both the physical and psychosocial aspects of illness or wellness in order to better care for patients. We invite readers to share their thoughts and experiences on this subject.

Dr. Shochet, Chairman, Resolution 2A/85 Subcommittee of the Med-Chi Public Relations Committee, is in the private practice of internal medicine and psychiatry in Baltimore City.

Much concern has been expressed in recent medical literature, and in the profession generally, about the public's perception of physicians. Public surveys have been commissioned at both national and local levels to find out what the public thinks about physicians and why. All the surveys corroborate what we see and read in the media every day: that the public is angry with physicians and does not hold our profession in as high esteem as in the past.

In an effort to better understand these phenomena, in fall 1984 the Baltimore City Medical Society appointed an Ad Hoc Committee to study this issue. The committee met over several months, reviewed the relevant medical literature and surveys available, and invited several representative members of the lay public to express their views to the committee.

Based on its discussions and its review of the literature, the committee identified the following statements that may be representative of the public's perception of physicians:

1. *The public seems to believe that physicians generally do not show respect and concern for their patients.* This apparent lack of respect and concern is characterized by long waits in offices, overbusy practices in which the physician takes little time to talk with the patient, and a lack of willingness to persuade patients to understand and participate in making medical decisions.
2. *The public seems to view physicians as a group that makes too much money.* This perception is generated by the ostentatious "life-styles" of some physicians and by the belief that some physicians spend more time on the business side of a medical practice than on patient care. While there is a belief that physicians make a lot of money, this alone does not anger the patient as long as the patient believes that he or she is being cared for and respected as a human being. They want the physician to listen to their concerns and to treat them as partners. They want the physician to take time to allay their fears or to share them. This, not the size of the bill, seems to be the major factor in the patient's perception of the physician.
3. *The public is very ambivalent and inconsistent in their views about health care costs, their genesis, and what can be done about them.* One person with whom the committee met stated that people are inundated with media concerns about health care costs, which they believe are the responsibility of physicians. There seems to be little differentiation in the public's mind of physicians' costs and hospital, drug, nursing home, or other costs. At the same time, there is evidence that the public places more credence in the physician's view on cost-containment programs than in the view of other groups.

   According to an article in the *New England Journal of Medicine* (Blendon, R.J. and Altman, D.E., "Public Attitudes about Health Care Costs" 311(1984): 613-16), while there seems to be a belief that high costs are a major problem in health care, the public does not believe that the high cost of health care is one of the nation's major problems. In addition, although the public is concerned about the rising costs of health care, this concern is centered on the individual cost of serivce and not on that portion of the nation's gross national product spent on health care. The public will support cost-containment programs that will not interfere with their own arrangements for care but will not support programs that will drastically alter the current delivery system.
4. *Physicians have lost the public's respect.* While there appears to be lowering of respect for physicians in the eyes of the public, reports are available showing the public has also lost respect for other professional groups: lawyers, clergy, news reporters, and public officials, to name a few. However, these surveys show that physicians continue to rank highest among the groups that the public trusts. It has been pointed out that the physician has a great deal of power in the patient's eyes, for example, admitting patients to hospitals, writing prescriptions for potent drugs, performing intimate examinations, etc. While such authority is conferred on the physician by society, that power is a source of fear and resentment to many patients. It has been stated that being a physician should be a service-oriented calling and not a profit-oriented business.

What can be done to counter these trends? We think physicians must show more interest in and respect for their patients' concerns, explaining procedures and

This column is contributed by the Public Relations Committee of the Medical and Chirurgical Faculty of Maryland. We encourage readers to share their thoughts and experiences on the subject. Med-Chi, Public Relations, 1211 Cathedral Street, Baltimore, MD 21201; James E. Bell MD, Chairman; Bernard R. Shochet MD, Editor.

plans for care, listening and responding to questions, and sharing patients' fears and anxieties with them. We must learn communication skills and have the willingness to apply them.

Both physicians and patients must develop more realistic expectations of each other and of the nature of illness. Physicians cannot expect to be universally loved by their patients and to have their pronouncements accepted without question. The public expects to be part of the medical decision-making process as it involves their illness or the illness of their loved ones. At the same time patients must understand that physicians cannot cure all their ills and that good medical care costs money.

The Baltimore City Medical Society presented these views to the House of Delegates of the Medical and Chirurgical Faculty of Maryland at its Annual Meeting in April 1985 and as a result, Resolution 2A/85 was adopted instructing the Public Relations Committee to "develop and direct and an effort toward improving and maintaining positive relationships between individual patients and their physicians and to coordinate the activities of local medical societies in this endeavor." A subcommittee of the Public Relations Committee was established to generate ideas for implementing Resolution 2A/85 and to date has made the following recommendations:

Our efforts should be organized toward two major programs, one to be directed toward educating the public and one directed at improving our own skills in dealing with patients.

A major public relations venture will include radio and television advertisements and public service programming delivering the message that the medical profession is interested in and contributing to the public welfare. Printed material on health matters and advice will be created and widely distributed through physicians' offices and other health-related outlets. Plans are being developed by Med-Chi's Auxiliary for an educational program in the schools and a bumper sticker. Other programs offered or being developed include services offered at health fairs, in the workplace, through speakers at community gatherings, and continuing health services offered to the General Assembly during their sessions and Boy Scout Camp health services. These demonstrate to the public that Maryland's physicians are concerned with the public welfare and are working collectively and individually to educate the public and to improve the public welfare.

As the other half of its recommendations, the committee strongly urges a coordinated statewide program to educate physicians in both communication and practice management skills to help them deal more effectively with their patients. This effort should start with the three medical schools in the state (Johns Hopkins University, The University of Maryland, and the Uniformed Services Medical School) including those subjects in their required curriculum. Communication skills and behavorial dynamics are an important part of medical education, at both undergraduate and graduate levels. Indeed, these skills need to be refreshed throughout a lifetime of medical practice by practitioners in all fields of medicine. This means statewide programs on a continuing basis, year after year, at the local level by component societies and at the state level at annual meetings. We should offer seminars, panel discussions, and workshops on physician-patient communications and office management skills. In addition, we must interact with the public through participation in open community forums on important health issues.

Another avenue for education is through our professional publications. We hope this column will become a regular feature through which two-way communication can be established with Med-Chi's membership. We will address issues of physician-patient relationships, communication skills, office management skills, and other related issues.



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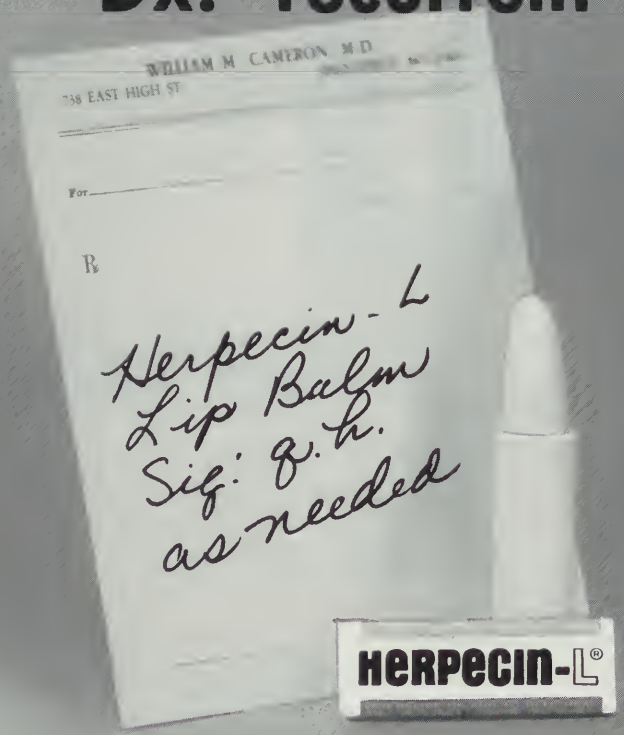
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Members in the News

Franklin L. Angell MD, Severna Park, was elected vice-chairman of the board of chancellors of the American College of Radiology at their annual meeting in Baltimore. Dr. Angell is chairman of the department of radiology at Mercy Hospital in Baltimore. He was born in Roanoke, VA, and is a 1947 graduate of the Medical College of Virginia School of Medicine in Richmond.

• • •

James P.G. Flynn MD, Baltimore, has been named director of the 150-bed Montebello Rehabilitation Hospital in Baltimore. Prior to his appointment, Dr. Flynn was Montebello's medical director and will now serve as the hospital's chief executive officer. Dr. Flynn received his medical degree with distinction in Medicine from Trinity College, Dublin University. He trained at the Johns Hopkins Hospital, Baltimore City Hospitals, Greater Baltimore Medical Center, and the State of Maryland Department of Health and Mental Hygiene. He earned master degrees from Trinity College and the Johns Hopkins University School of Hygiene and Public Health.

During the last few years, Montebello has changed its focus from chronic care to comprehensive rehabilitation. Recently it became accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF). Montebello, which is managed by the University of Maryland Medical System, specializes in treating head and spinal cord injuries, stroke, polytrauma orthopedics, and general rehabilitation.

• • •

Elliot R. Goldstein MD, Potomac, secretary/treasurer of Suburban Hospital's Medical Staff, has been elected to the Advisory Council to Suburban Hospital. He will serve on the Marketing and Planning Committee of the Board of Trustees. A native of Washington, DC, Dr. Goldstein completed his internship and residency at the Georgetown University Hospital. An Edward Livingston Trudeau Fellow, he is an instructor at the Georgetown University School of Medicine. He is a past research associate with the National Institutes of Health.

Patricia Kellogg MD, Rockville, has been named to the Board of Trustees at Suburban Hospital. A graduate of Wellesley College, Dr. Kellogg received her degree in medicine from the University of Maryland Medical School in 1976. She has been a member of the Suburban Hospital Medical staff since 1979, is a member of its Executive Committee, and is chairperson of its Pharmacy Committee.

• • •

Thomas G. Sinderson MD, Rockville, has been elected to the Advisory Council to Suburban Hospital to serve on the Public Affairs Committee of the Board of Trustees. He is graduate of Emory University and the George Washington University Medical School.

• • •

Gordon M. Smith MD. Frederick, who is Chief of the Ambulatory Care Service of the U.S. Soldiers' and Airmen's Home, King Health Center, was recognized for 35 years of continued membership in the American Academy of Family Physicians (AAFP) in September during its 38th Annual Convention and Scientific Assembly in Washington, DC. Thirty of those years were spent in Family Practice in western Montgomery County.

• • •

In the aftermath of the Chernobyl nuclear power plant disaster, the AMA formed a committee to address the health problems associated with nonmilitary radiation incidents, emergencies, and accidents. The Advisory Committee on Nonmilitary Radiation Emergencies will guide organizational activities at the state and local levels as well as serve as a body of expertise at the national level. Among committee members is **Henry Wagner** MD, Johns Hopkins University School of Medicine, Baltimore.

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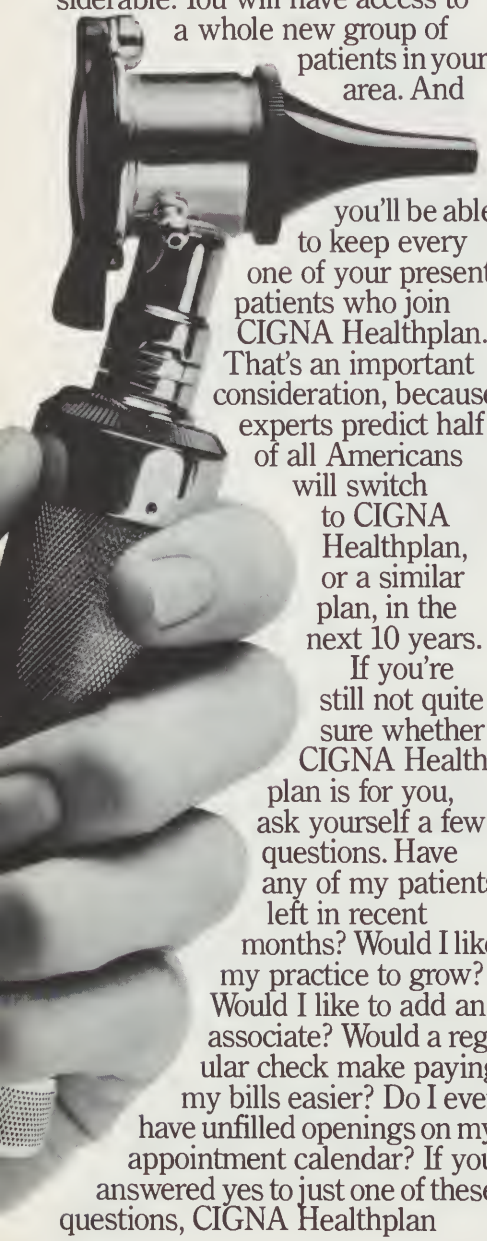
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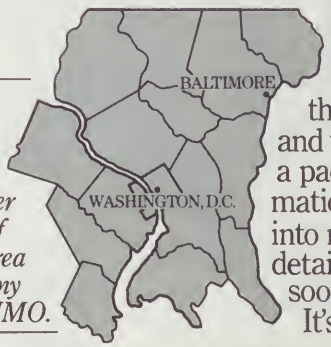
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John Sargeant CAE

CONSTANCE TOWNSEND

Townsend retired as an Assistant to the Executive Director after 21 years at the state's medical society as Jack Sargeant's right-hand person. **Correspondence:** 8102 Glen Gary Road, Baltimore, MD 21234.

November 25, 1985, the day John Sargeant finally gave in to an illness he could no longer battle, will be a landmark in the annals of the Medical and Chirurgical Faculty. His death was described as marking the end of an era, and well it might have been. As with most people who commanded respect and admiration throughout their careers, his accomplishments, his peccadillos, and his influence will long be remembered but never copied. He saw Med-Chi through 27 years of continuous change and growth; he felt the pulse of the community, accurately diagnosed the directions of the state government, and prescribed large doses of curative solutions.

I have been requested to recall and describe the specific areas of influence Jack Sargeant had on the medical profession in Maryland; I do so with real humility and trepidation. Jack was my mentor. One could not work with him day after day over many years without picking up the subtleties common to association management, yet Jack's handling of sensitive matters and his ability to cope with difficult and ever-changing situations was innate and not easily transferable to others.

Jack's influence was so indirect and even covert at times that many of his associates were not aware of the part he played in decision making. In his 27 years he had to deal with 27 presidents: each came from a different part of the state, bringing with him a unique background of varying individual ideas and goals. Jack made the necessary adjustment to each one (no easy task) and served each equally with constant humanness, adjusting his relationship in a manner that would most benefit Med-Chi. This was a subtle trait, unnoticed by all but a few.

I so respect the breadth of his knowledge and the width of his influence, I hope to be able to recount instances and events that may give some insight into what made Jack run. Five specific areas of Jack's influence on the physicians of Maryland come to mind immediately. Probably there are more, but these were the major components of a changing medical world and a changing medical society.

Peer Review

In today's climate, peer review is a household word. It would be difficult to pin down the exact time, society, or person who originated the term and the activity of peer review. I do know that in Maryland it originated in the mid-1960s when a small group of physicians met at someone's home (at Jack's instigation, I believe) to discuss this new term and to outline a plan for its implementation. Physician discipline was just beginning to be recognized as a necessary component of the medical society's responsibilities to the community as well as to its own members. Efficient, well-trained, conscientious physicians were being tarred with the same brush as were the quacks and the less conscientious. The media was beginning to pick up on instances of malpractice and, too often, cases were tried by the public without benefit of full knowledge.

It became apparent to even the most conservative physicians that "something" had to be done to counter the bad publicity. A hue and cry went up for better public relations, but along with additional funding requests, Jack warned that only with every individual physician giving attention to and treating each of his own patients in a responsible and caring way could "something" be accomplished. Only then would the media and the public acknowledge the many good things being achieved by the medical community.

Many physicians saw peer review as a "snitch committee" designed to look over the shoulder of colleagues and to second-guess the clinician in his office. With great care and finesse, Jack spoke with Med-Chi leaders, convincing them of the need for peer review activity, at the same time assuring members of the media and the Legislature that physicians were willing to be their own watchdogs, taking responsibility for weeding out the dishonest and incompetents, while setting up other means of assisting those who were sick or simply in need of up-dated training. This was a long and arduous task.

Destroying the "God" image physicians have held was unpopular. However, Jack had a way of steering physicians' thinking, getting them to face up to situations, and then encouraging them to discover solutions. Privately, Jack often expressed exasperation and disgust with bad doctors, but he liked the profession of medicine and was protective of its reputation. Today, peer review is accepted as not only a responsibility to the medical community but also to the general public as a means of preserving the position of respect physicians have enjoyed.

It seemed a natural extension of the peer review process to carry out the work of the reviewers with a firm, legalistic approach to discipline. Before 1968, Med-Chi's only sanction of a physician was to remove him from society membership (if he was a member). Its only legal recourse was on the basis of moral turpitude (whatever that was!). Again, Jack and Med-Chi leaders took on a highly unpopular task of designing a disciplinary program that would satisfy the needs of the public to be protected, simultaneously protecting innocent physicians from unwarranted invasion of their practice

or vindictive accusations.

From a year or more of study, proposals, and counterproposals came a law to establish the Commission on Medical Discipline. Today, even under constant scrutiny and attack, the Commission stands as a model of fairness and equitable adjudication of medical complaints. From Karl Mech MD, who helped to design and to promote the Commission to the Legislature, and "Ted" Lewers, MD, current Med-Chi president, come the exact expressions of appreciation for the foresight and tenacity of Jack Sargeant in giving the medical community a program that evokes admiration from other areas of the country. I have discussed the Maryland program in detail with officials of several other states and heard their expressions of surprise that such a program has been accepted by so many. They would like to duplicate the system, at least in part.

Physician Rehabilitation

While the Committee on Physician Rehabilitation may be just another committee listed in Med-Chi's *Handbook*, it has meant much more than that to Med-Chi. In 1977, a few physicians saw the need for some way of dealing with those colleagues who were in trouble with either legal or professional authorities because of substance abuse or psychiatric difficulties. Jack met with these physicians and, together, they set the stage for a unique program developed and financially supported through voluntary assessments by member physicians and some contributions from outside sources into an effective, compassionate, and responsible group. A great deal of criticism and skepticism was directed at the committee from outside groups, but Jack was steadfast in his personal support and in promoting its development with the Commission on Medical Discipline and the State Legislature. Maryland ranks among the progressive leaders in the field of physician rehabilitation and leads most other states in apprehending and disciplining drug-abusing physicians who cannot or will not be helped.

Legislation

State Delegate Larry Young, Chairman of the Environmental Matters Committee, stated at Jack's testimonial during the Society's 1986 Annual Meeting,

> Jack was a lobbyist par excellence. He was the first one in the door to present his point of view, and the last one out the door, to be sure he was the first and the last to be heard.

This statement points out the kind of lobbyist the medical society had in Jack. He was a politician in the best sense of the word, not only in the legislative field but also in dealing with physicians, his own colleagues, and the public. He was a "workaholic" who put in 60-plus hours a week, every week, every year—ask his family about that! He believed that every vote counted and worked to get every favorable vote possible.

For several years, regulation versus competition was an important issue in the health care field. Jack became a proponent of the regulated system, but he always believed the competitive system had its place. A man of great tact, he usually let legislators think they were right even if he believed they were wrong. Many aspirants to government office turned to Jack for advice on how to get the support of the medical profession, both in votes and in financial backing. After making sure their positions could be sold to physicians, and if he believed they were sincere in presenting those positions, Jack introduced them to the appropriate Med-Chi leaders and waited for the natural course of events to occur. This skillful matching of physician/legislator or physician/politician was done with insight as to the personalities and thought processes of each party. If peripheral benefits fell to Jack in the process, so be it.

George Malouf MD, a past president of Med-Chi and close friend of Jack's, said he believed physicians did not always understand the motives of third party payors and government relations. Jack, however, influenced physicians by bringing facts and proposals to them for consideration. He seemed to understand the kinds of objections that might be offered and from where they might come, and he was able to lead the discussions so a proper solution could be found. He aligned the medical profession on the correct side of many issues when the physicians might have been inclined in a different direction. Jack made the profession sensitive to the needs of society, other health care professionals, government, etc. Physicians sometimes have a tendency to stand fast on an issue and declare it is not negotiable. But sooner or later legislators must be faced, and Jack very often sidetracked that kind of confrontation.

Malpractice Insurance

In late 1974, it was announced that the St. Paul Insurance Companies would no longer serve physicians for professional liability insurance coverage. There was talk of strike by certain groups of physicians who refused to work without adequate professional liability coverage. The profession was prepared to dig in its heels. But while Jack was vigorous in stating that this was medicine's concern and should not be parceled out to others, he made physicians understand what other people needed and wanted. The search began for other companies to take over liability insurance, which had begun to present problems in other states as well. There

were no immediate takers.

Jack and Med-Chi leaders considered a new concept that had been introduced in a few other areas of the country: a physician-owned insurance company. When Med-Chi (with some difficulty) accepted that idea, the wheels began to turn rapidly. A committee of physicians and insurance industry advisors was formed to iron out the details of such a company; but that wasn't enough. The State Legislature had to be convinced that this was a much-needed innovation, and it was foreseen this would not be an easy task. Jack's on-going rapport with the Governor and legislative leaders stood Med-Chi in good stead as never before. A law was passed in 1975 to assess all practicing physicians $300 for the privilege of funding their own insurance company, Medical Mutual Liability Insurance Society of Maryland. After June 1, 1975 any physician practicing in Maryland who desired coverage by Med Mutual was required to pay the $300 fee. There is consensus that if Jack had not had friends in the right places or the respect and friendship of the influential members of the Legislature and the Governor, the insurance crisis of 1975 might have been much worse and taken much longer to be resolved.

The problem was not completely resolved, of course, and Jack never stopped working to bring new and viable ideas to the attention of Med-Chi and legislative leaders to improve the situation. At the time of his death, Med-Chi was ready to embark on the largest public relations and legislative push it had ever attempted because the problem of rising premiums and disappearing coverage had again come to a head. Because of the groundwork laid over the past several years, and with the experience gained under his tutelage, Jack's successors were able to realize a great measure of success.

Med-Chi Policies

"He was medicine's conscience in many ways," said Arthur Keefe, MD, a past president, Secretary of the Board of Medical Examiners, and Medical Director of Blue Shield. "He made us consider things until our conscience was pricked, and we had to respond in some way." Jack's way of exhibiting that influence was always subtle and never confrontational. He never said "You must do this." Instead he brought together the people on both sides of an issue so they could exchange views, and he became a mediator. Jack had tremendous resources of personal contacts and knowledge. He didn't sit in his office and wait for people to come to him but was out several nights a week, meeting people from all walks of life, obviously at some sacrifice to his family.

Maryland has a leading and innovative medical society by any measure, due largely to Jack's interaction with his counterparts in other medical societies and his contacts at AMA. Charles O'Donnell MD, a past president and long-time friend of Jack and his family, said, "Jack always knew where medicine was going. He somehow sensed new trends at AMA and elsewhere and saw that Maryland was in the forefront of the changes as they occurred."

Just as he gave his full attention and respect to all levels of elected state officials, Jack made himself as available and helpful to the smallest county society as he did to the largest. Several times he held Med-Chi together—in the face of threats of secession from a few—by his constant reminders to the county society leaders that their strength lay in the consolidation of the whole medical community.

He worked closely with one of the smallest county societies when it successfully sued the Maryland government to upset a petition that had been filed to restrain the expansion of the county's hospital. The larger counties, with their own administrators and legal counsel, did not require the same kind of assistance. They did, however, call on Jack's expertise, experience, and professional contacts for backup of their own endeavors.

A most effective liaison between Med-Chi and the Department of Health and Mental Hygiene (always pushing for continuing involvement of Med-Chi with DHMH policy making bodies), Jack helped to create the Maryland Admissions Review Program, a precursor to the current PRO program in Maryland. While this is now a government-mandated program, the experience gained through the voluntary Maryland program was invaluable in implementing the new system. In the area of cost containment, Jack was outspoken in his charge to physicians to reduce unnecessary ancillary tests. While he acknowledged the pressure on physicians to practice defensive medicine in the face of ever-increasing numbers of malpractice suits, he encouraged moderation in the interest of containing costs.

Richard Davidson, Executive Vice-President of the Maryland Hospital Association, expressed his high regard for Jack's efforts in promoting better relations between the medical society and the Maryland Hospital Association. The two executives arranged for their Executive Committees to meet periodically, and it is believed this created a model for hospital administrative and medical staffs to follow. There has been, for many years, a spirit of cooperation between the two bodies despite differing positions on some issues.

John Adams MD, former chairman of the Commission on Medical Discipline, said of Jack,

> His most effective trait was that he was an excellent politician. He was not a "red neck" and could see the practical side of things: what was attainable and what was not; and he tempered his approach accordingly.

There were times, of course, when Jack's temperate approach was annoying and unsatisfactory to many physicians. Those who wanted to speak out more positively or to attack their attackers believed Jack was too mild and did not truly represent their own reactions. However, the old adage, "You can catch more flies . . ." applied in this case: Med-Chi, as an organization, is respected by knowledgeable people, and its spokespersons are given full attention in any forum.

One of Jack's policies as an executive advisor was to review with each Council Chairman the agenda for each meeting. He was able to anticipate negative as well as positive responses to most issues, allowing the chairman to be prepared to handle uncommon situations in proper parliamentary manner. Jack had all the necessary background information at hand (or in his head) upon which the Chairman could draw when necessary. Many officers and committee chairmen owe the smoothness and efficiency of carrying out their assignments to Jack's preparation, his knowledge, and his training of his assistants.

Conclusion

In preparing this tribute to Jack, I contacted many of Med-Chi's past and current leaders as well as several people outside the profession. Through the comments and opinions of each ran a current of deep respect and affection as well as a great sense of loss. In reflection, there are times when some of us who worked so closely with Jack wonder how he accomplished it all. He attended numerous seminars and educational programs on the subject of office management and administration, but when he got home he threw away the book. He did many things the book said shouldn't be done, and he neglected to do some of the things the book recommended. Somehow, though, he enjoyed the loyalty of his staff, and he was able to extract the maximum work from the minimum work force. Perhaps one thing that bound the Indians to the Chief was the fact that no job was too menial for him. He took out the trash if necessary; he stuffed envelopes in a pinch just before leaving for a meeting with the Governor.

No, they don't make many of that breed any more. Jack probably would be embarrassed by this reminder of all his attributes, but then he would smile and say "You're right, of course, I am all those things!" Modesty was not one of Jack's prime virtues. He knew he was good in what he did, and probably that's why he took such care to preserve that reputation. Well, preserved it is, for all time.

In my testimonial to Jack given during the session of the House of Delegates during the 1986 Annual Meeting, I listed a theoretical job description for association executives I found in a throwaway publication. Let me list those qualifications once more and leave you with my sincere belief that Jack Sargeant did, indeed, fill all these qualifications and set the stage for the continuing success of the Medical and Chirurgical Faculty of the State of Maryland.

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Lyme Disease: A Mimicker of Juvenile Arthritis

ROBERT N. LIPNICK MD, TAHIR SAIT MD, PATIENCE H. WHITE MD, and OM P. CHHABRA MD

Lyme disease has been reported in 24 states including Maryland, which is considered an endemic area for the disease.

From the Children's Hospital National Medical Center, Department of Child Health and Development, George Washington University School of Medicine. Reprints: Robert N. Lipnick MD, Children's Hospital National Medical Center, Division of Rheumatology, 111 Michigan Ave. NW, Washington, DC 20010.

Lyme disease is a recently described disease[1] caused by a newly recognized spirochete, *Borrelia burgdorferi*,[2,3] which is transmitted by the bite of the *Ixodes dammini* tick.[4,5] The disease usually begins in the summer with a characteristic skin lesion, erythema chronicum migrans, accompanied by fever, headache, stiff neck, myalgias, arthralgias, generalized malaise, and fatigue. Weeks to months later, neurologic and cardiac abnormalities or chronic arthritis may develop. Early recognition and treatment of Lyme disease may prevent or attenuate subsequent arthritis.[6,7]

Although reported in 24 states,[8] a few isolated cases have been reported in Virginia, but no cases to date have been reported in West Virginia. Since Maryland is an endemic area for Lyme disease, it is anticipated that the number of reported cases in Maryland children will continue to increase in the coming years. We recently encountered a case of Lyme arthritis from La Plata, Maryland.

Case

A healthy, nine-year-old female from La Plata, Maryland presented to the hospital in February 1986 with left knee swelling and pain for three days. She was seen by her pediatrician the previous day: decreased flexion without warmth or erythema of the left knee was noted and an x-ray was obtained that demonstrated an effusion with no other abnormalities. She was referred to Children's Hospital National Medical Center for further evaluation and treatment.

She denied trauma to the knee, rash, fever, chills, anorexia, weight loss, chest pain, mental status change, sore throat, or any other joint complaints. Her past history is significant for a tick bite in June 1985. Two weeks after being bitten, she developed a large erythematous pruritic rash over her trunk that then extended to her legs. The rash lasted approximately five days and was diagnosed as allergic; it improved with benadryl. Two months after the rash disappeared, she developed swelling of her right knee. The swelling lasted three to four days and resolved with aspirin. Since the first episode of swelling in August 1985, the patient reported swelling of one of her knees on different occasions, each lasting three to four days before resolving with aspirin.

Findings of the physical examination were completely normal with the exception of the musculoskeletal exam, which demonstrated a small medial effusion and large, tense suprapatellar effusion of the left knee. Range of motion was limited in flexion, and there was mild tenderness on palpation. There was no erythema or increased warmth. Laboratory evaluation included a hemoglobin 11, hematocrit 33, WBC 13.4 P57 L36 M3 E2, platelet count 556K, ESR 57, and a normal urinalysis. Rheumatoid factor and antinuclear antibody were negative.

An arthrocentesis of the left knee yielded 65 cc of straw-colored fluid with a WBC 27,500 with 90 percent polys, glucose 74, protein 4.4 g, and all cultures were negative. The presumptive diagnosis of Lyme arthritis was made, and the patient was hospitalized for a two-week course of intravenous penicillin 20 million units per day. She had three subsequent arthrocenteses of which the last yielded 30 cc, and the WBC had decreased to 15,000. The patient was discharged on Tolectin for follow-up in two weeks. Lyme antibody returned at that time positive 1:4,096. In March, the patient had persistence of left knee swelling and Tolectin was increased to 400 mg q.i.d.

The patient continued to have persistence of left knee swelling in May despite continued treatment with Tolectin. Follow-up Lyme antibody titer was 1:2,048. By July there was marked decrease in left knee swelling, but the Lyme antibody titer remained elevated.

Since the diagnosis of Lyme disease was made in the patient just described, two other children from the same geographic area in Maryland have been diagnosed to have Lyme disease, confirmed by serological testing.

Discussion

As the title of this article indicates, the chronic arthritis of Lyme disease easily may be confused with juvenile rheumatoid arthritis of the monoarticular or pauciarticular type. It was in this mode of presentation that the disease first attracted medical attention. But as we learn more about Lyme disease, it is now clear that this disease has a broad spectrum of clinical manifestations and needs to be considered in the differential diagnosis of a number of other diseases.

The initial manifestations may be similar to many viral illnesses including infectious mononucleosis, anicteric hepatitis, and enteroviral infections. Coupled with the fact that in one study only 31 percent of the patients reported a history of previous tick bite and only 60 percent had the typical rash (erythema chronicum migrans), it behooves physicians to keep Lyme disease in mind when faced with a patient with nonspe-

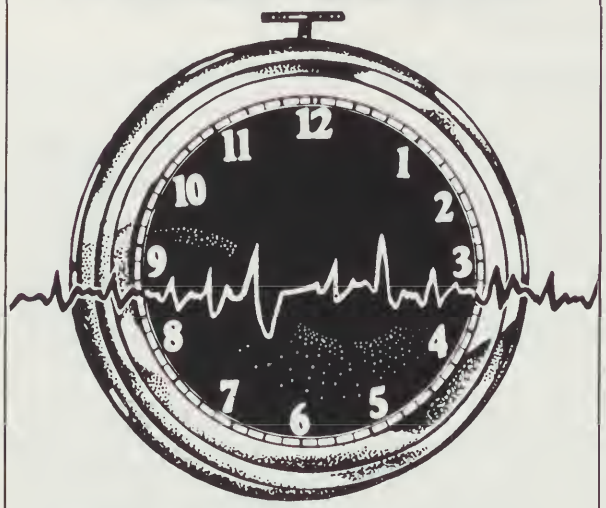
cific symptoms and signs, especially intermittent and changing in nature.

The observation that early and appropriate antibiotic treatment may have a beneficial effect on the course of Lyme disease has important implications in making an early diagnosis. Serological testing for Lyme disease is commercially available, adding an important aid for the practicing physician who considers Lyme disease a possibility to confirm or rule out in making a diagnosis.

References

1. Steere, A.C.; Malawista, S.E.; Syndaman, D.R. *et al.* "Lyme Arthritis: An Epidemic of Oligoarticular Arthritis in Children and Adults in Three Connecticut Communities." *Arthritis Rheum* 20 (1977):7–17.
2. Burgdorfer, W.; Barbour, A.G.; Hayes, S.F. *et al.* "Lyme Disease—A Tick-Borne Spirochetosis?" *Science* 216(1982):1317–19.
3. Benach, J.L.; Bosler, E.M.; Hanrahan, J.P. *et al.* "Spirochetes Isolated from the Blood of Two Patients with Lyme Disease." *N Engl J Med* 308(1983):740–42.
4. Steere, A.C.; Broderick, T.E.; and Malawista, S.E. "Erythema Chronicum Migrans and Lyme Arthritis: Epidemiologic Evidence for a Tick Vector." *Am J Epidemiol* 108(1978):312–21.
5. Steere, A.C. and Malawista, S.E. "Cases of Lyme Disease in the United States Locations Correlated with the Distribution of *Ixodes dammini.*" *Ann Intern Med* 91(1979):730–33.
6. Steere, A.C.; Malawista, S.E.; Newman, J.H. *et al.* "Antibiotic Therapy in Lyme Disease." *Ann Intern Med* 93(1980):1–8.
7. Steere, A.C.; Hutchinson, G.J.; Rahn, D.W. *et al.* "Treatment of the Early Manifestations of Lyme Disease." *Ann Intern Med* 99 (1983):22–26.
8. "Update: Lyme Disease—United States." *MMWR* 33(1984): 268–70.

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Systemic Diseases with Retinitis Pigmentosa-like Changes

DAVID J. WILSON MD and W. RICHARD GREEN MD

The ophthalmoscopic and histopathologic features of retinitis pigmentosa (RP) are not specific and can be seen in many systemic diseases that affect the retinal photoreceptor and retinal pigment epithelial functional unit. Because in certain of these diseases a reversible metabolic defect is known and in others significant associated systemic abnormalities exist, it is important to recognize these diseases and distinguish them from RP.

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The diversity and confusing nosology of the diseases capable of producing a pigmentary retinopathy makes attempts to classify these diseases into useful groups frustrating. In 1982 J. Francois reviewed the metabolic tapetoretinal degenerations and classified these diseases as affecting either lipid, carbohydrate, or protein metabolism. A similar classification is used here, but we include only those conditions with a retinitis pigmentosa-like ophthalmoscopic appearance.

Diseases Associated with Abnormal Lipoprotein and Lipid Metabolism

Abetalipoproteinemia (Bassen-Kornzweig[1]) is a rare autosomal recessive disorder characterized by: (1) acanthocytosis, (2) mild fat malabsorption and steatorrhea, (3) a progressive spinocerebellar degeneration similar to Friedrich's ataxia, (4) atypical pigmentary retinopathy, and (5) marked abnormalities of plasma lipids.

The underlying defect in this disorder appears to be the inability of liver and intestinal cells to produce B-protein containing lipoproteins[2,3] resulting in reduction of all major plasma lipids to less than 50 percent of normal levels and a total absence of very light density lipoproteins and chylomicrons. The serum levels of the fat-soluble vitamins are very low, and this may be of pathogenetic importance in the ocular changes seen in abetalipoproteinemia.

The primary ocular manifestation of abetalipoproteinemia is a pigmentary retinopathy. The retinopathy can appear at any age but usually is encountered between the ages of 13 and 19.[4] The ophthalmoscopic appearance of the pigmentary retinopathy is variable and may be similar to that seen in RP[5,6] or may resemble retinitis punctata albescens.[6,7] One patient had no pigmentary retinopathy at the time of her death at age 36.[8] Central vision can be affected by the pigmentary degeneration.[1,9] Electroretinographic evidence of rod and cone dysfunction and increased thresholds on dark adaptation have been reported[6] and may precede the appearance of pigmentary retinopathy.[10] Success in reversing these electroretinographic abnormalities has been achieved in some patients treated with vitamin A,[6,11] but in another case, pigmentary retinopathy developed despite vitamin A therapy.[7]

The absence of pigmentary retinopathy in hypovitaminosis A, unassociated with abetalipoproteinemia, has led Muller *et al.*[12,13] to suggest that hypovitaminosis E may play a contributing role in the pigmentary retinopathy in abetalipoproteinemia. The presence of a pigmentary retinopathy in vitamin E-deficient rats[14,15] and in a patient with hypovitaminosis E due to short-bowel syndrome[16] would support this hypothesis. Francois[4] has reported three patients receiving vitamin E therapy who had no pigmentary retinopathy or severe neurologic disease in their late second and early third decades. Muller *et al.*[12] followed eight patients who were supplemented with vitamins A, E, and K; in three patients, the pigmentary degeneration was prevented or stopped.

It is clear from these studies that the malabsorption of fat-soluble vitamins plays an important role in the pigmentary retinopathy of abetalipoproteinemia, but there is no reported conclusive evidence that replacement therapy prevents the pigmentary retinopathy.

Von Sallman *et al.*[17] reported the light microscopic findings in the posterior segment of the eyes from a patient with abetalipoproteinemia and advanced visual field constriction due to pigmentary retinopathy. The findings were similar to those seen in advanced RP. In the macular area there was some preservation of the photoreceptor cells and RPE (Figure 1A). Outside the macular area there was extensive degeneration of the photoreceptor cells (Figure 1B), and hyperplasia of the RPE with migration into the retina in a perivascular location (Figure 1C). The retinal blood vessels were markedly sclerotic with hyalinization of their walls and reduction in lumen caliber.

Hypobetalipoproteinemia is an autosomal dominant disorder, but the manifestations of the disease in the heterozygote are mild. The manifestations include abnormally low, but present, light-density lipoproteins[18,19] and normal high-density lipoproteins.[18,20] Heterozygous patients usually display no clinical evidence of disease, but Yee *et al.*[21] reported one patient with a mild pigment epithelial irregularity, slightly abnormal cone dark-adaptometry threshold, and subtle

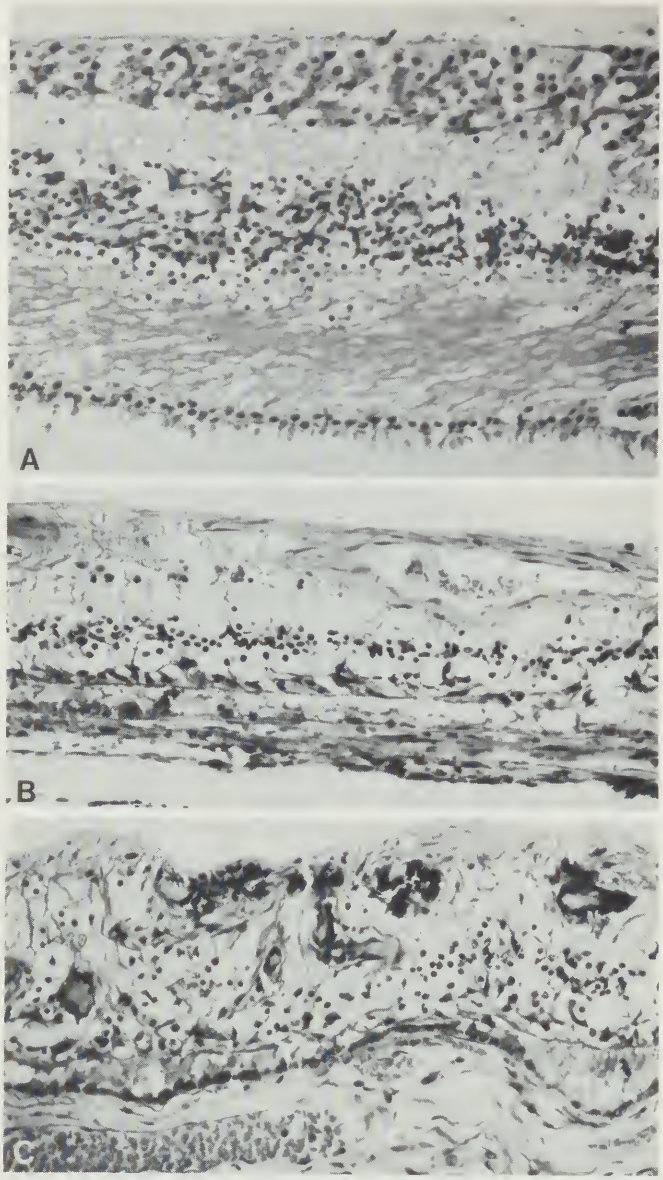


Figure 1. Bassen-Kornzweig syndrome. **A** Parafoveal area showing normal ganglion cell, and inner nuclear and plexiform layers. Outer nuclear layer is much reduced in thickness; outer segments are absent; and the remaining few inner segments are stubby (hematoxylin and eosin, × 310). **B** Mid-periphery, showing discontinuous retinal pigment epithelium (RPE) and photoreceptor cell degeneration (hematoxylin and eosin, × 300). **C** Equatorial area showing total photoreceptor cell atrophy and much RPE hyperplasia, with migration into retina in perivascular location (hematoxylin and eosin, × 300) E.P. 34436.

visual field defect. Van Buchem *et al.*[22] reported a heterozygous patient with abnormal fundi, the abnormality being described as "fine shining dots."

Patients homozygous for hypobetalipoproteinemia have clinical manifestations similar to abetalipoproteinemia. In fact, one of the earliest reported cases of abetalipoproteinemia[23] was really a patient homozygous for hypobetalipoproteinemia. Systemic manifestations of homozygous hypobetalipoproteinemia include: (1) absent chylomicrons, very light-density lipoproteins, and B-apolipoprotein, (2) reduced plasma vitamin A and E levels in untreated patients,[24,25] (3) acanthocytosis, and (4) pigmentary retinopathy. Notably, the neuromuscular manifestations seen in abetalipoproteinemia are milder or absent in hypobetalipoproteinemia.[25] The pigmentary retinopathy seen in homozygotes with this disease is similar clinically to that seen in RP.[21,26,27] The macula can be affected, with reduction in visual acuity. The electroretinogram in patients with pigmentary retinopathy shows extinction of both rod and cone mediated responses.[4,21] Several of the younger patients homozygous for hypobetalipoproteinemia have had no pigmentary retinopathy[23,26] and one patient who had no pigmentary retinopathy at age seventeen months developed early pigmentary degeneration by six years of age.[23]

One would expect by analogy to abetalipoproteinemia that malabsorption of fat-soluble vitamins plays a role in the pigmentary retinopathy and electrophysiologic changes in hypobetalipoproteinemia, but no reports on the effect of vitamin replacement in these patients have been published. No histopathologic study of the pigmentary retinopathy in hypobetalipoproteinemia has been reported.

Neuronal ceroid lipofuscinosis describes a group of autosomal recessive diseases characterized by the intracellular accumulation of ceroid and lipofuscin pigments in neural, visceral, and somatic tissue. There is no detectable abnormality of sphingolipid metabolism in neuronal ceroid lipofuscinosis distinguishing it from the gangliosidoses.[28] On the basis of clinical criteria, four different subclasses of neuronal ceroid lipofuscinosis have been created.[29,30] With the possible exception of the Haltia-Santavuori subtype, overlap exists between the subtypes and therefore they should not be considered separate nosologic entities.

1. *Infantile type (Haltia-Santavuori type)* This disease is manifest in the first 8 to 18 months of life and is rapidly progressive with death occurring at five to seven years of age. The clinical characteristics were described by Santavuori *et al.*[30] and consist of hypotonia, ataxia, pronounced psychomotor retardation, myoclonic jerks, "knitting" hyperkinesia, microcephaly,

and retinal degeneration. Seizures are less common in this subgroup than in the Jansky-Bielschowsky or Spielmeyer-Sjogren types. The retinal degeneration is a consistent and early finding in patients with infantile neuronal ceroid lipofuscinosis. The peripheral retina is hypopigmented but lacks the bone spicules seen in classic RP. Optic artrophy, narrowing of the retinal blood vessels, and a brownish discoloration of the macula is present. Hagberg and coworkers[31] described almost total loss of retinal ganglion cells and photoreceptor cells in one patient with infantile neuronal ceroid lipofuscinosis. The ultrastructural features of the retinal degeneration have not been described. In the brain, membrane bound accumulations of granular osmophilic material are present in the macrophages, astrocytes, endothelial cells, and pericytes.[32] No curvilinear or fingerprint inclusions similar to those seen in the Jansky-Bielschowsky and Spielmeyer-Sjogren types of neuronal lipofuscinosis are present. The ERG is totally extinguished even in patients without ophthalmoscopic evidence of retinal degeneration.

2. *Late infantile type (Jansky-Bielschowsky)* This form of neuronal ceroid lipofuscinosis is characterized by the onset of symptoms between ages two and four. The presenting symptom is usually seizures, but the disease is rapidly progressive and dementia and blindness are constant findings in the late stages of the disease. Neutrophils from patient with this disease frequently demonstrate azurophilic hypergranulation, but this feature is not unique to the late infantile form of neuronal ceroid lipofuscinosis.[33] An early report[34] that leukocyte p-phenylenediamine mediated peroxidase is deficient in leukocytes in this condition has not been substantiated by others.[35–37]

Visual disturbances usually are not present until after the onset of the seizure disorder. Clinically, the retinal degeneration can appear similar to that seen in RP, but more commonly, pigment abnormalities are seen in the macular region only. This often has a ring or bull's-eye configuration[38,39] (Figure 2A). Light and electron microscopic studies[39,40] have demonstrated partial photoreceptor degeneration in the posterior pole (Figure 2B), distended ganglion cells (Figures 2B, 3A), and numerous membrane-bound cytosomes containing curvilinear material in retinal pigment epithelium (Figure 3B), inner segments of photoreceptor cells (Figure 4A), Muller cells (Figure 4B), retinal ganglion cells (Figure 5A), and iris dilater muscle cells (Figures 5B, 6).

Carpenter *et al.*[41] have correlated the electron microscopic findings in neuronal ceroid lipofuscinosis with the clinical classification. He found that patients with cytosomes containing curvilinear material in almost all instances presented with clinical findings characteristic of the late infantile type of neuronal ceroid lipofusci-

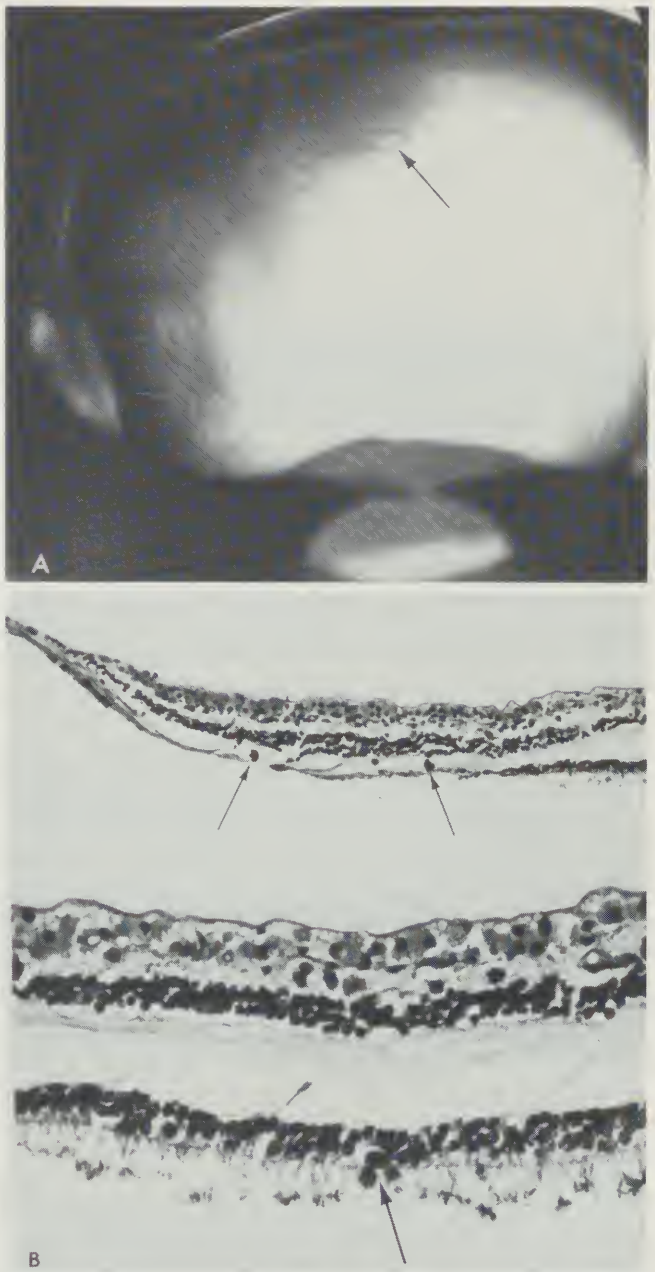


Figure 2. Neuronal ceroid lipofuscinosis (late infantile type). **A** With transillumination, posterior pole of eye shows distinct ring of pigment around foveola (arrow). Pigmentation was difficult to see on direct examination. Optic disk is pale. AFIP Neg. 78-85059-1. **B** Top, Photoreceptors and outer nuclear layer, present on right, become severely degenerated as they approach center of foveola (at left). Scattered pigment-laden macrophages cling to the outer plexiform layers of the retina (arrows) (periodic acid-Schiff, × 160). AFIP Neg. 79-11280. Bottom, Paramacular region shows good preservation of retinal architecture and many enlarged ganglion cells with distended periodic acid-Schiff-positive granular cytoplasm and eccentric nuclei. A few periodic acid-Schiff-positive macrophages are attached to the outer retina (arrow) (periodic acid-Schiff, × 400). AFIP Neg. 79-11281.

nosis. Although cytosomes containing curvilinear material are highly specific for this disease, they have been described in chloroquine intoxication[42] and in tissue cultures of neurons exposed to lysergic acid diethylamide.[43]

3. *Juvenile type (Spielmeyer-Sjogren)* Characteristically, the presenting symptom in this form of neuronal ceroid lipofuscinosis is visual deterioration. The age of onset is usually four to eight years and the clinical course is slowly progressive. Spalton and coworkers[44] have reviewed the clinical findings in this disease and found that neurologic symptoms (seizures, mental deterioration) usually occurred about two to four years after the onset of visual symptoms. Vacuolization of peripheral lymphocytes is a constant finding in patients with this disease. The fundus findings in the patients reported by Spalton *et al.*[44] were frequently subtle and misdiagnosed. The most common finding was a pigmentary disturbance in the macula described as a bull's-eye macular dystrophy. The peripheral retina varied from normal to showing pigment epithelial atrophy with bone spicule pigmentation identical to that seen in RP. The RP-like changes were present only late in the disease.

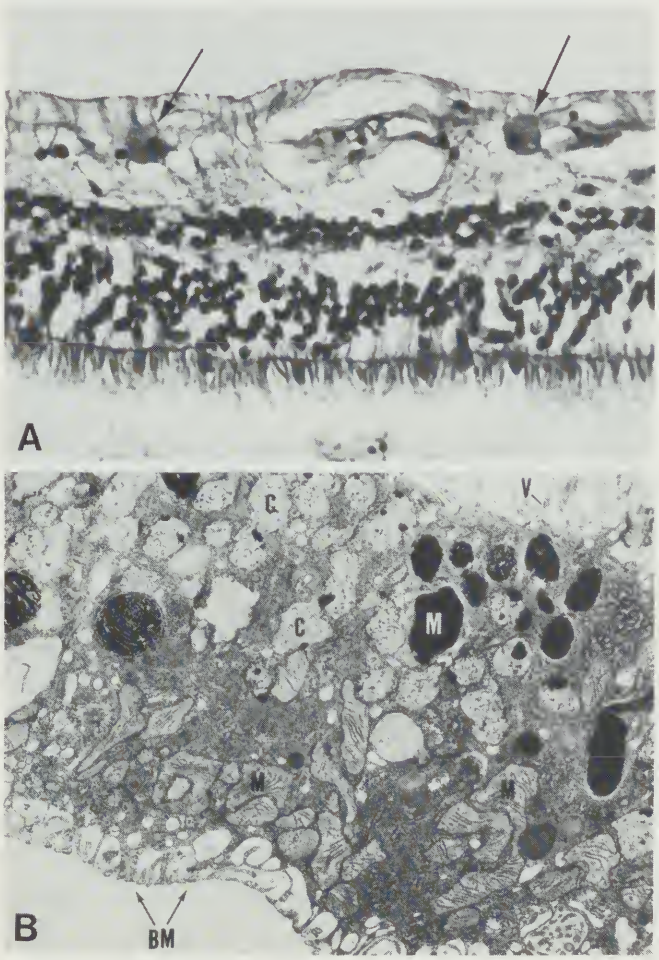


Figure 3. **A** Mid-periphery of retina, nasally, shows relatively good preservation of architecture (except for mild postmortem autolysis of outer segments of photoreceptors). Two ganglion cells (arrows) with distended granular cytoplasm and eccentric nuclei are present (hematoxylin and eosin, × 160). AFIP Neg. 79-11282. **B** RPE cells show numerous membrane-bound cytosomes (C) located mainly toward the middle and apical portions of cells. Mitochondria (M) are located toward basilar cytoplasm. White M indicates melanin granule; BM, basement membrane; V, villi (× 13,125). AFIP Neg. 79-12604-1.

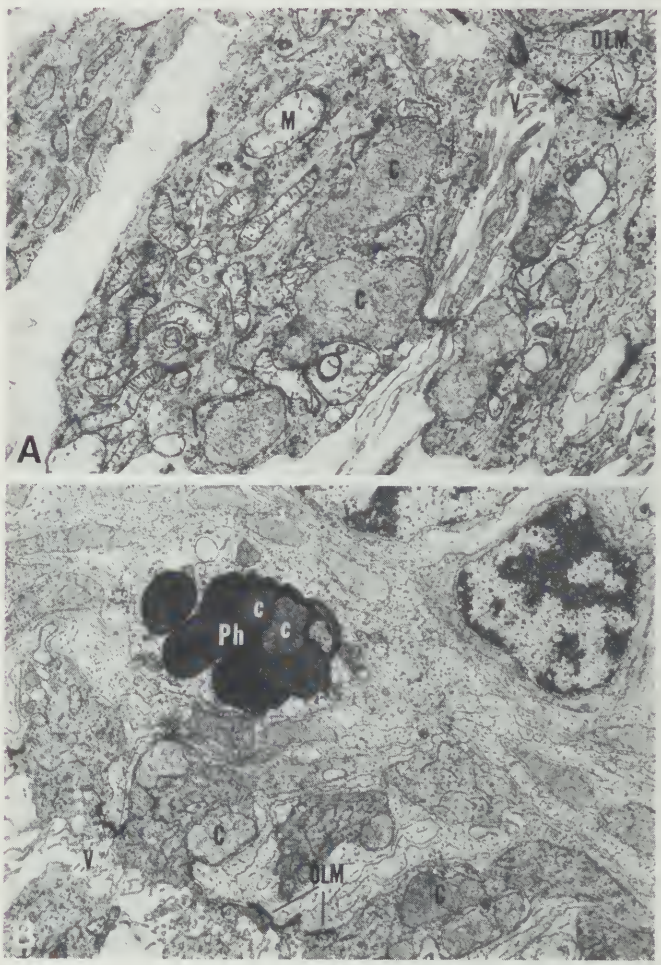


Figure 4. **A**, Inner segment of cone cell displaying numerous mitochondria (M) and larger membrane-bound cytosomes (C) containing curvilinear structures. Numerous microvilli (V) from Müller cells are present. OLM, outer limiting membrane (× 13,125). AFIP Neg. 79-12604-2. **B** Portion of lucent cytoplasm of Müller cell containing large phagosome (Ph) that has incorporated several dense, membrane-bound cytosomes (white C). OLM, outer limiting membrane; black C, cytosomes. Numerous microvilli (V) from Müller cells are present (× 8438). AFIP Neg. 79-12604-3.

Histologic studies of the retina in this disease have shown severe retinal changes.[45,46] Goebel *et al.*[47] have observed the total loss of the photoreceptor cell layer in two advanced cases and partial preservation of the outer nuclear layer in the periphery of one patient with a shorter clinical duration. The inner retinal layers were normal. Pigment-laden macrophages were present in the retina in a perivascular location (pathologic correlate of bone spicule pigmentation).

Electron microscopic studies[41,47] have demonstrated cytosomes in the ganglion cells, Muller cells, pericytes, and endothelial cells of ocular tissues in this form of neuronal ceroid lipofuscinosis. Carpenter *et al.*[41] have emphasized that the cytosomes in the juvenile type of neuronal ceroid lipofuscinosis are heterogeneous, with fingerprint, "rectilinear," and "granular osmiophilic" deposits being present. Goebel *et al.*[47] have reported "zebra body" inclusions in the sclerocytes of one patient.

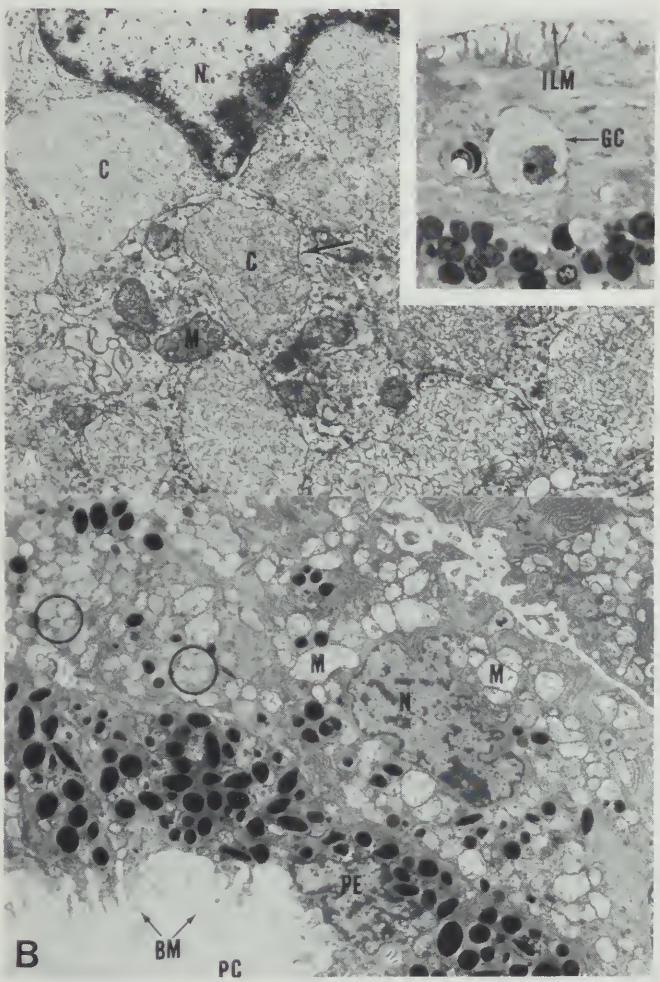


Figure 5. **A** Swollen ganglion cell cytoplasm with numerous cytosomes (C), each surrounded by membrane (arrow) and containing curvilinear bodies. Cytosomes indent nucleus (N); M, mitochondrium (× 18,750). AFIP Neg. 79-12604-4. Inset: Distended ganglion cell (GC) with finely vacuolated cytoplasm; ILM, internal limiting membrane (Toluidine blue, × 740). **B** Double layer of iris pigment epithelium demonstrates large number of cytosomes (within circles) located predominantly in the anterior cell layer; BM, basement membrane of posterior layer; M, mitochondria; PC, posterior chamber; PE nucleus of pigment epithelial cell (×, 6,000). AFIP Neg. 12604-5.

4. *Adult type (Kuf's disease)* This form of neuronal ceroid lipofuscinosis usually begins after twenty years of age and is characterized by a slowly progressive dementia and occasionally seizures. Examination of the fundus is usually normal. No histopathologic study of the ocular tissues has been reported, but studies of other tissues have shown that fingerprint and granular osmophilic deposits are present in Kuf's disease.[41]

Refsum's disease[48] is an autosomal recessive condition with four characteristic clinical findings that become manifest in childhood or during the second decade: (1) pigmentary retinopathy, (2) cerebellar ataxia, (3) peripheral polyneuropathy, and (4) high cerebrospinal fluid protein concentration with an absence of pleocytosis. Other findings: nerve deafness, anosmia, cardiac arrhythmias, ichthyosis-like skin changes, and epiphyseal dysplasia are less consistently present.

This disease is the consequence of deficiency of phytanic acid alpha oxidase and the resulting accumulation of phytanic acid in the blood and tissues.[49,50] Exclusion of phytanic acid and phytol from the diet of patients

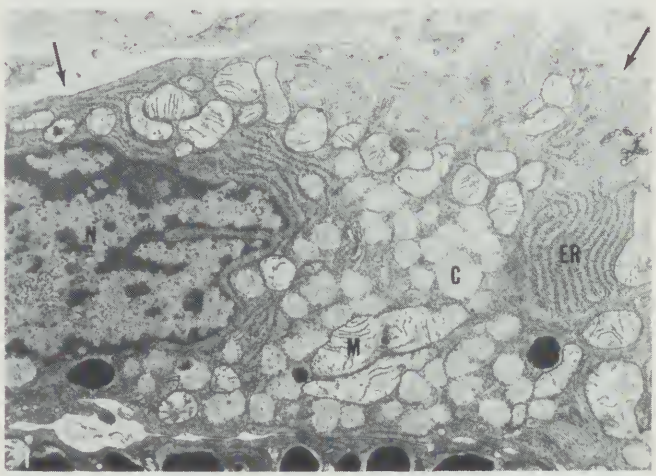


Figure 6. Anterior cell layer of iris pigment epithelium discloses numerous membrane-bound cytosomes (C) intermixed with slightly swollen mitochondria (M). Arrows, basement membrane; ER, endoplasmic reticulum; N, nucleus (×, 14,000). AFIP Neg. 79-12604-6. (From Schocket, S.S., Jr; Font R.L.; Morris, H.H., III. "Jansky-Bielschowsky Form of Neuronal Ceroid-lipofuscinosis. Ocular Pathology of the Batten-Vogt Syndrome. *Arch Ophthalmol* 98(1980):1083.)

with Refsum's disease can normalize serum phytanic acid levels and has produced arrest and improvement in the peripheral neuropathy and regression of ichthyotic changes and ECG abnormalities.[51] No regression has been noted in auditory or visual defects.

One of the essential findings in Refsum's disease is pigmentary retinopathy, and one of the first clinical symptoms may be nyctalopia. The pigmentary retinopathy may be identical to that seen in RP, or atypical pigmentary changes consisting of a salt-and-pepper appearance may be present. The pigmentary retinopathy is progressive and leads to progressive narrowing of the visual fields and extinction of the electroretinogram (ERG).

There have been several reports of the ocular histopathology in Refsum's disease.[52–58] Levy[56] noted photoreceptor cell loss and migration of pigmented cells into the retina. Toussaint and Danis[58] conducted histologic and histochemical studies of eyes from a patient with Refsum's disease. They observed the changes of RP with atrophy of the photoreceptor cell layer and hyperplasia of the retinal pigment epithelium with migration into the retina in a perivascular location in the mid-periphery (Figure 7). The retinal vessel walls were thickened and contained lipid material and in some places were surrounded by pigmented cells also containing lipid. In some areas the retinal pigment epithelium was absent, but where present, it was loaded with lipid material. Lipid material was also present in the sclera, trabeculum, ciliary epithelium, and iris dilator and sphincter muscles.

Infantile phytanic acid storage disease, a recently described syndrome,[59–61] is probably autosomal recessive. Clinical abnormalities that have been described in this disorder include: neonatal jaundice, hemolytic anemia, bleeding diathesis, abnormal liver function tests, hepatomegaly, dysmorphic features (epicanthal folds, low-set ears, single palmar creases), microphthalmia, and hypotonia. Later in infancy and during early childhood, growth and/or mental retardation become evident. A pigmentary retinopathy with a prominent macular dystrophic component develops within the first two years of life, and electroretinographic abnormalities of both the rod and cone ERG are present.[61] The serum phytanic acid level is elevated in this disease and not to the extreme levels seen in Refsum's disease. In addition, infantile phytanic acid storage disease can be distinguished from Refsum's disease by liver biopsy. Liver biopsies in patients with infantile phytanic acid storage disease show lamellar or membranous lipid inclusions[59,60] not present in Refsum's disease. The long-term effect of dietary phytol and phytanic acid restriction in these patients is not known. No histopathologic studies of this condition have been reported.

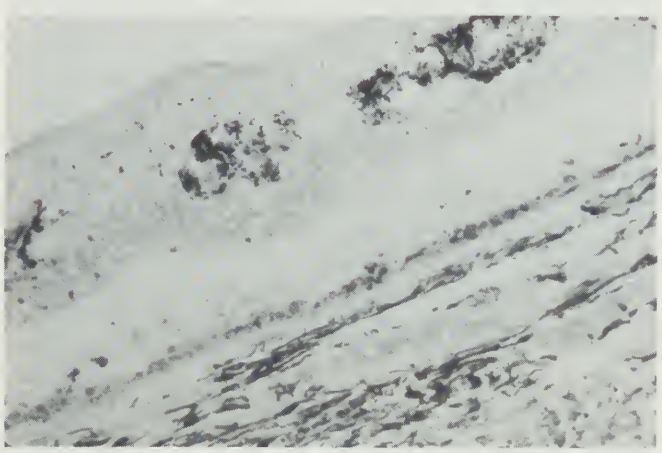


Figure 7. Refsum's disease. Area just posterior to equator shows photoreceptor cell degeneration, hyperplasia of RPE, with migration into retina in a perivascular location. Lipid accumulation is present in the RPE (Oil red 0, × 160).

Diseases Associated with Abnormal Carbohydrate Metabolism

Mucopolysaccharidosis (MPS) is a group of diseases including several disorders in which the retinal findings are similar to those seen in RP. All the MPS are autosomal recessive with the exception of MPS-II (Hunter's disease), which is X-linked recessive. Only those MPS that mimic RP will be discussed here.

1. *MPS I-H (Hurler's disease)* is a severe progressive disorder caused by the deficiency of the lysosomal enzyme alpha-L-iduronidase and usually leads to patients' death before age ten. The clinical abnormalities consist of (1) skeletal deformities: shallow orbits, scaphocephaly, lumbar lordosis, chest deformities, and dwarfism; (2) hepatosplenomegaly; (3) mental retardation; (4) cardiovascular abnormalities; and (5) ocular abnormalities.

In addition to the corneal clouding present in MPS I-H, a tapetoretinal degeneration has been observed consisting of a pigmentary retinopathy, optic atrophy, and narrowing of the retinal vessels.[62] The ERG is nearly always subnormal or extinct and the electro-olfactogram (EOG) may be subnormal.

The light microscopic features of the eyes from patients with Hurler's disease have been reported by Lindsay *et al.*[63] Newell and Koistinen,[64] and Chan *et al.*[65] Chan and coworkers[65] studied the ultrastructural findings in the entire globe of a patient with Hurler's disease. The retinal pigment epithelial cells were distended by cytoplasmic inclusions of fibrillogranular material (Figure 8) and occasional multimembranous material, were hypopigmented, and contained occasional pigment granules in various stages of degradation

pigment granules in various stages of degradation within inclusions containing fibrillogranular and membranous material. This change suggests that a process of autophagocytosis of melanin pigment had resulted in relative depigmentation of the pigmented epithelia (Figure 9). Ganglion cells were distended mainly by multimembranous material (Figure 10) and widespread degeneration of the photoreceptor cell layer (Figure 10, inset) was present.

2. *MPS I-S (Scheie's disease)* is a milder form of Hurler's disease sharing the same enzymatic defect of alpha-L-iduronidase, which leads to the accumulation of dermatan sulfate and heparan sulfate in various tissues. The clinical manifestations are much milder in Scheie's disease and include (1) severe corneal clouding; (2) stiff joints; (3) aortic valve abnormalities; and (4) pigmentary retinopathy. Mental retardation is not a feature of Scheie's syndrome.

Gills *et al.*[62] studied nine patients with Scheie's disease and found ERG evidence of tapetoretinal degeneration in four patients. In one of those patients the relative corneal clarity permitted ophthalmoscopy, and perivascular retinal pigmentation was described in both eyes. No histologic study of the retina and choroid in Scheie's disease has been reported.

3. *MPS II (Hunter's disease)* is characterized clinically by (1) stiff joints; (2) coarse facial features; and (3) dwarfism. Hunter's disease is distinguished from Hurler's disease by the absence of corneal clouding and by its X-linked recessive inheritance. The enzyme defect in this disorder is iduronate sulfatase, and this leads to the accumulation of dermatan sulfate and heparan sulfate. At least two clinical forms of Hunter syndrome are recognized and are differentiated primarily on the basis of central nervous system involvement. Most authors note that there is a broad spectrum. The more severe form (MPS II-A) is associated with death

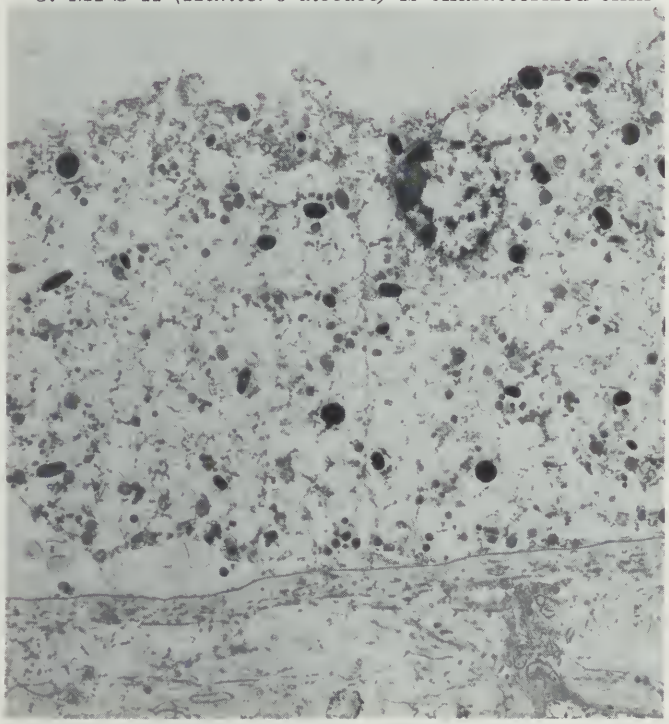


Figure 8. MPS I-H (Hurler syndrome). RPE is hypopigmented and greatly distended by inclusions containing fibrillogranular material (× 5,500).

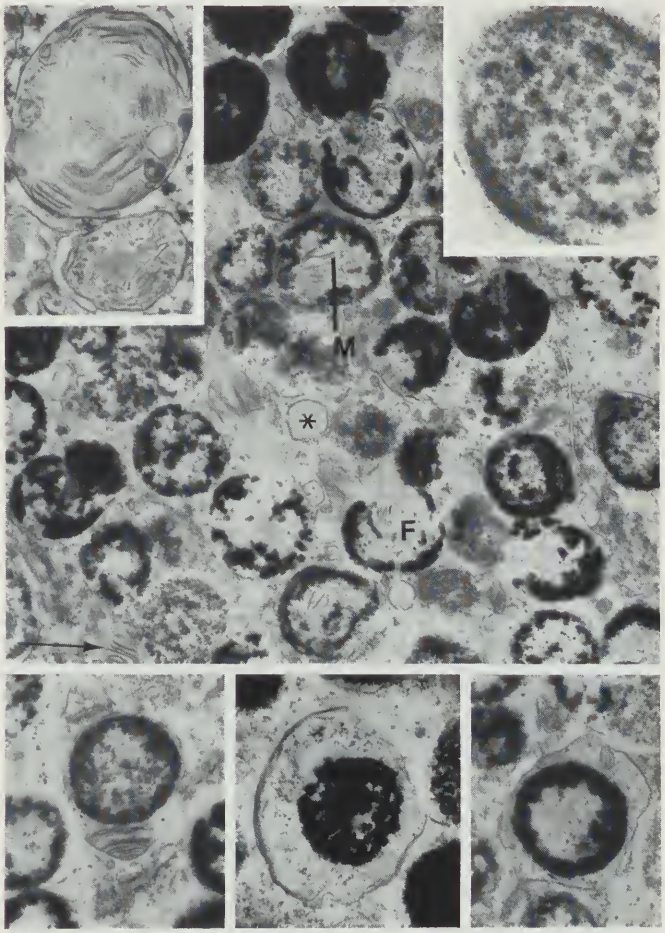


Figure 9. MPS I-H. Inclusions in iris pigment epithelium contain fibrillogranular material (asterisk) and occasional multimembranous material (arrows and upper left inset). Melanin pigment granules in various stages of degradation contain both fibrillogranular (F) and membranous materials (M and upper right inset). Some partially degenerated melanin granules are present within membrane-bound inclusions that contain fibrillogranular material (lower middle and right insets) or fibrillogranular and membranous material (lower left inset) (main figure, × 22,000; insets: upper left, × 29,200; upper right, × 62,500; lower left, × 31,900; lower middle, × 29,400; lower right, × 31,700).

by age sixteen; patients with MPS II-B have survived to age fifty or older.

The primary ocular manifestation of MPS II-B is a pigmentary degeneration of the retina, which may be indistinguishable from classic RP.[62,66] The pigmentary retinopathy of the less severe form (MPS II-B) has been studied by light microscopy[66] and by electron microscopy.[67] Those studies showed intracytoplasmic membrane-bound vacuoles in the retinal ganglion cells and retinal pigment epithelium that contained membranous lamellae. The retinal photoreceptors were degenerated, and in the preserved areas marked shortening of the outer segments was noted (Figure 11). The outer nuclear layer was thinned to a thickness of 1 to 2 cells and the retinal pigment epithelium was present in only a few areas. Accumulation of hyperplastic retinal pigment epithelial cells around retinal blood vessels was also noted.

In comparing the ocular pathology of MPS II-A[68] and II-B,[67] the ultrastructural appearance of stored material is identical, with both showing fibrillogranular and, less commonly, multimembranous inclusions (Figure 12), but the distribution of stored material differs slightly. Type II-A appears to be associated with storage in corneal endothelial cells and iris pigment epithelium, sites not affected in Type II-B. Inclusion of melanin granules in the same membrane-bound structures as fibrillogranular material and multimembranous material was seen in the iris and ciliary pigment epithelium of II-A, but was absent in II-B. The retinal pigment epithelium contained fibrillogranular inclusions in II-A and multimembranous inclusions in II-B. Photoreceptor cell degeneration was present in both types but was more severe in MPS II-A. Photoreceptor cell degeneration and pigmentary changes in MPS II-B were, except for the inclusions, indistinguishable from primary retinitis pigmentosa. Neither II-A nor II-B was associated with distension of corneal keratocytes, although both types showed storage in these cells. Thus, the ultrastructural features of MPS Type II are quite similar,

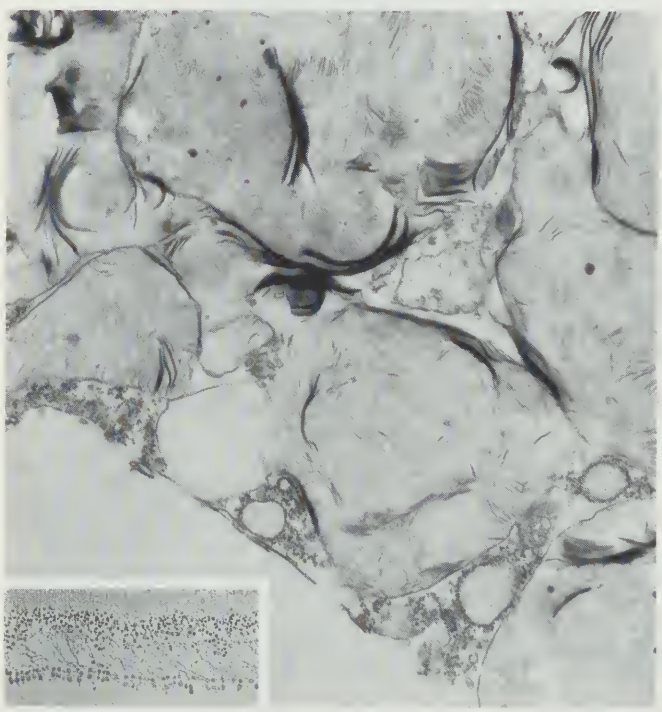


Figure 10. MPS I-H. Retinal ganglion cell is quite distended by inclusions containing large aggregates of multimembranous material (× 26,000). Macular retina (inset) shows much atrophy of the photoreceptor cell layer, with only one layer of nuclei in the outer nuclear layer and total loss of outer segments; the few remaining inner segments are short and stubby (paraphenylenediamine; phase contrast, × 480. (From Chan, C.C.; Green, W.R.; Maumenee, I.H.; and Sach, G.H., Jr. "Ocular Ultrastructural Studies of Two Cases of the Hurler Syndrome (Systemic Mucopolysaccharidosis I-H)." *Ophthalmol Pediatr Genet* 2(1983):3.)

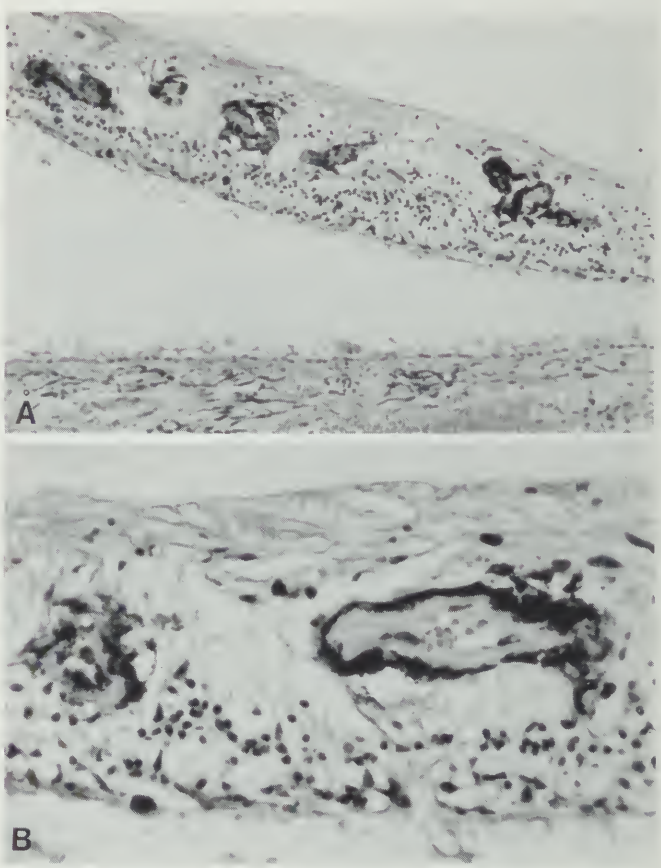


Figure 11. MPS II-B. Area just posterior to equator shows extensive loss of the photoreceptor cell layer and hyperplastic RPE in retina in a perivascular location (hematoxylin and eosin: A, × 100; B, × 160).

with the exception that inclusions are seen in corneal endothelium and iris pigment epithelium, and melanophagocytosis in the iris and ciliary pigment epithelia are present in form II-A.

4. *MPS III-A (Sanfilippo syndrome)* is characterized by a deficiency of heparan N-sulfatase that leads to the accumulation of heparan sulfate. The clinical presentation in Sanfilippo syndrome is characterized by severe mental retardation, incoordination of gait, contractures, and deafness. The skeletal and somatic abnormalities seen in MPS I-H are not a conspicuous feature of MPS III-A.

A tapetoretinal degeneration resembling RP may be present in Sanfilippo syndrome-A.[62,69] The light microscopic studies of the eyes from patients with MPS III-A have been reported by Jensen[70] and Vogel *et al.*[71] Del Monte and coworkers[69] examined by light and electron microscopy the eyes of a patient with MPS-III-A who had poor vision, flat electroretinograms, and fundus changes similar to those of classic RP (Figure 13). Phase-contrast and electron microscopy showed extensive intracellular accumulation of fibrillogranular (acid MPS) and membranous lamellar (complex lipid) vacuoles in retinal ganglion cells and retinal pigment epithelium (RPE), as well as other cell types. Retinal pigment epithelial hyperplasia and hyperpigmentation, intraretinal RPE migration (Figure 13), vascular attenuation, and marked photoreceptor loss were prominent and closely resembled those occurring in inherited RP.

5. *MPS III-B (Sanfilippo syndrome B)* is distinguished by the enzymatic defect of a deficiency of N-acetyl-alpha-D-glucosaminidase. The phenotype of MPS III-B is distinguishable from III-A.

Lavery and coworkers[72] have reported a light and electron microscopic study of the eyes from a patient with MPS-III-B. Cytoplasmic, single-membrane-bound vacuoles containing the major storage product, acid mucopolysaccharide, were found in virtually every ocular tissue. Lamellar cytoplasmic membranous bodies of complex lipid were found mainly in the retinal ganglion cells (Figure 14) and the lens epithelium. Many tissues had inclusions that were of an intermediate type and were composed of combined fibrillogranular and lamellar membranous material. Hypopigmentation of the neuroepithelial pigment layers (that is, iris, ciliary, and retinal) seems to be the result of autophagocytosis with melanolysis (Figures 15, 16). Photoreceptor cell degeneration was similar to that seen in some forms of RP (Figures 17, 18). The mechanism of photoreceptor cell degeneration is unknown, but it may be the result of

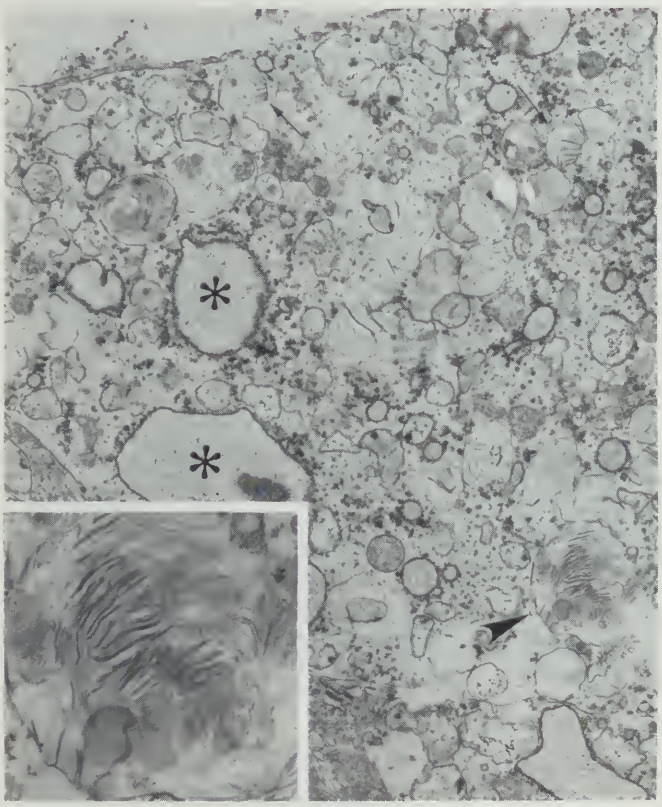


Figure 12. MPS II-A. Retinal ganglion cell is greatly distended by inclusions. Some (asterisks) contain only fibrillogranular material; others (arrows) both fibrillogranular and multimembranous material; and still others (arrowhead and inset) contain only multimembranous material (× 13,500; inset, × 35,000). (From McDonnell, J.M.; Green, W.R.; and Maumenee, I.H. "Ocular Histopathology of Systemic Mucopolysaccharidosis, Type II-A (Hunter Syndrome, Severe)." *Ophthalmology* 92(1985):1772.)

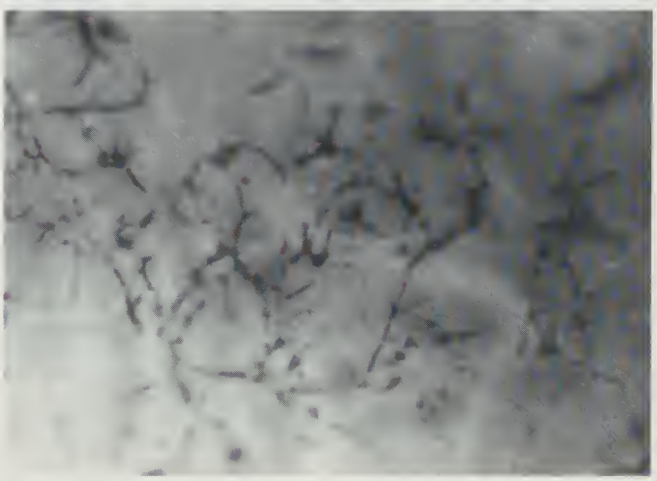


Figure 13. MPS III-A. Gross internal view shows spiculate pigmentary change due to hyperplastic RPE in the retina in a perivascular location. (From Del Monte, M.A.; Maumenee, I.H.; Green, W.R.; and Kenyon, K.R. "Histopathology of Sanfilippo's Syndrome." *Arch Ophthalmol* 101(1983):1255.)

metabolic dysfunction due to accumulation of mucopolysaccharide in the retinal pigment epithelium.

6. *MPS III-C, D* are two additional types of Sanfilippo syndrome that have been described,[73-75] but the ophthalmic manifestations have not been reported.

Systemic Diseases without a Known Metabolic Defect

Central Nervous System Diseases

1. Hallervorden-Spatz is an autosomal condition characterized by[76] (1) onset at a young age; (2) extrapyramidal motor dysfunction with dystonic posturing, muscular rigidity, chorioathetoid movements, ataxia hyperreflexia and spasticity; (3) dementia; and (4) a relentlessly progressive course leading to death in early adulthood. In three cases[77-79] acanthocytosis with normal lipid and betalipoprotein levels has been noted.

Dooling *et al.*[76] found that almost one-fourth of the patients with this syndrome had retinal degeneration. Newell *et al.*[80] found that these patients formed a distinct group that had a much earlier onset and more rapid course. The ophthalmoscopic appearance of the pigmentary retinopathy, described by Dooling *et al.*,[76] Newell *et al.*,[80] and Luckenbach *et al.*,[79] consists initially of a flecked retina appearance with later bone spicule formation and a bull's-eye maculopathy. The ERG is extinguished early in the course of the disease.[79,80]

Similar light microscopic findings have been reported by Roth *et al.*[77] and Luckenbach *et al.*[79] These studies disclosed extensive atrophy of the photoreceptor layer throughout the retina but especially in the posterior

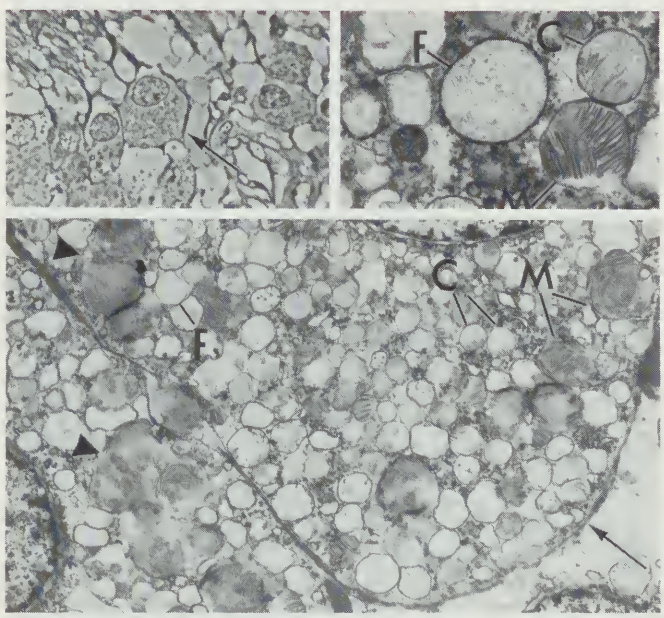


Figure 14. MPS III-B. Retinal ganglion cells are distended by granular material and vacuoles (arrow, upper left inset) that, by electron microscopy, are inclusions, some of which have only fibrillogranular material (F); but most have a combination of fibrillogranular and membranous material (C), and many of them (M) have only membranous material. All these types of inclusions are shown in the main figure and at higher power in the upper right inset. Occasional large aggregates of apparently confluent membranous inclusions (arrowheads) are present (× 10,400; upper left inset, paraphenylenediamine, × 1,250; upper right inset, × 27,400).

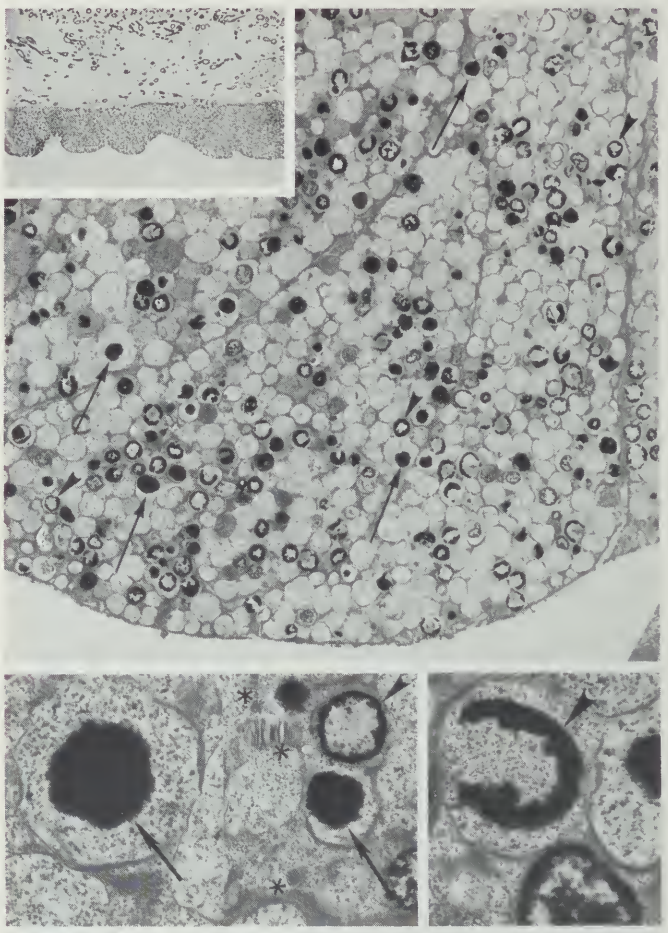


Figure 15. MPS III-B. Iris pigment epithelium is greatly distended by vacuoles (upper inset) that, by electron microscopy, are membrane-bound inclusions containing fibrillogranular material with intact and also partially degraded melanin granules. Rarely, stacks of membranous inclusions are observed at higher power (asterisks, lower center inset). Melanin granules within storage vacuoles have various appearances. These granules may be relatively intact and located centrally (arrows and lower left and center insets), have central area of fibrillogranular material (arrowheads, lower center and right insets), or various patterns of greater degrees of destruction (× 4,350; upper inset, paraphenylenediamine, × 1,250; lower left inset, × 27,600; lower center inset, × 16,000; lower right inset, × 25,600).

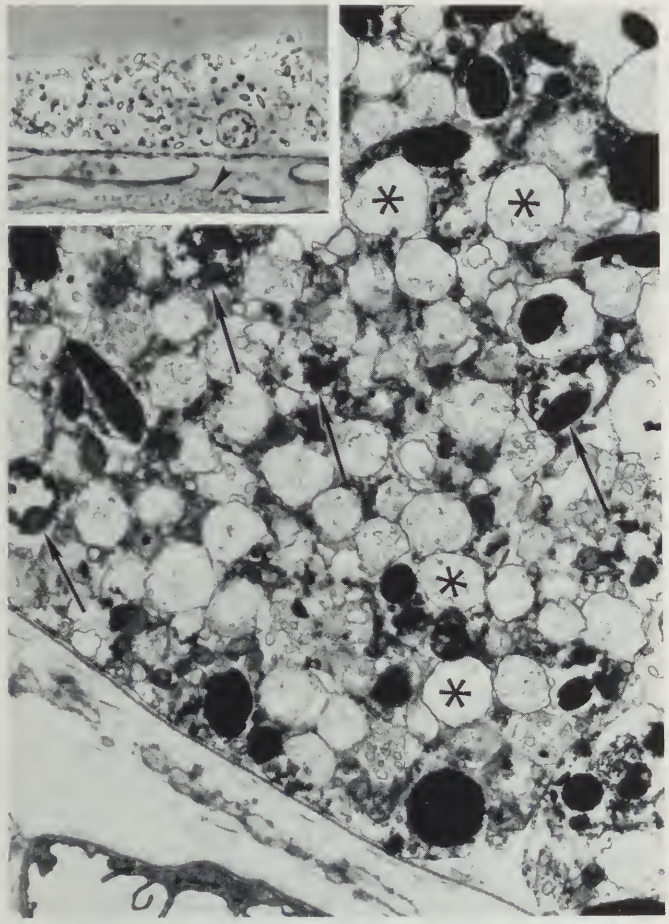


Figure 16. MPS III-B. RPE is partially depigmented and is distended by vacuoles (inset) that, by electron microscopy, are membrane-bound inclusions containing fibrillogranular material (asterisks). Many inclusions contain melanin pigment (arrows) in various stages of degradation. Fibrocyte in choroid (arrowhead, inset) is distended by vacuoles (× 13,500; inset, paraphenylenediamine, × 1,250). (Figures 14–16 From Lavery, M.A.; Green, W.R.; Jabs, E.W.; Luckenbach, M.W.; and Cox, J.L. "Ocular Histopathology and Ultrastructure of Sanfilippo Disease, Type B." *Arch Ophthalmol* 100(1983):1263.)

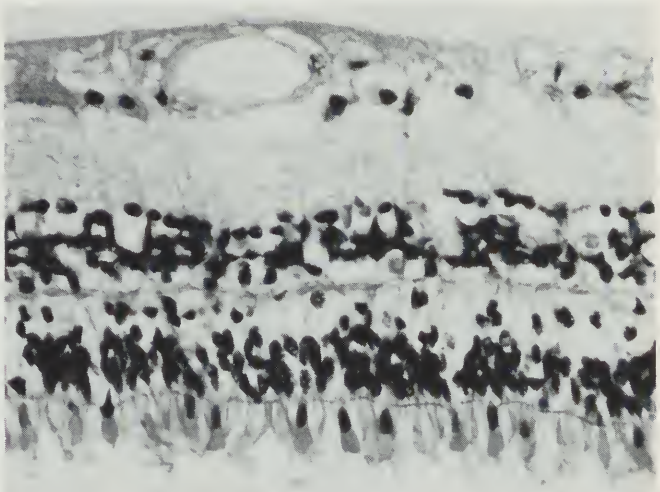


Figure 17. MPS III-B. Hallervorden-Spatz disease. Temporal midperipheral retina showing mild thinning of outer nuclear layer, moderate loss of inner segments, prominent loss of outer segments, and migration of cone nuclei into inner segment zone (hematoxylin and eosin, × 460).

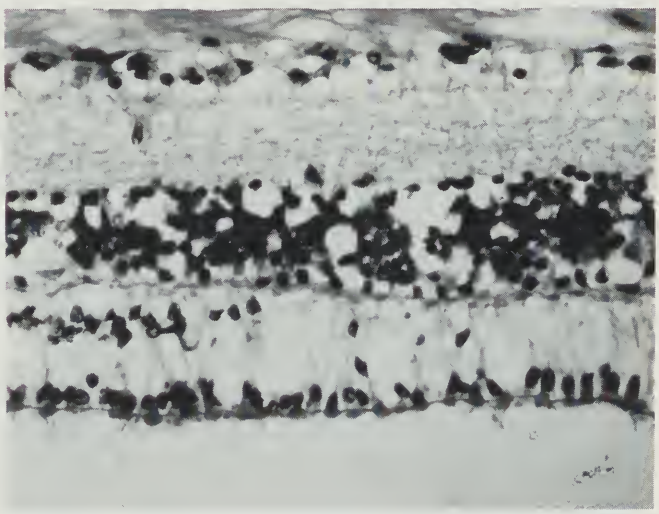


Figure 18. Posterior nasal retina showing much thinning of outer nuclear layer, total loss of outer segments, and severe loss of inner segments of photoreceptor cells (hematoxylin and eosin, × 460).

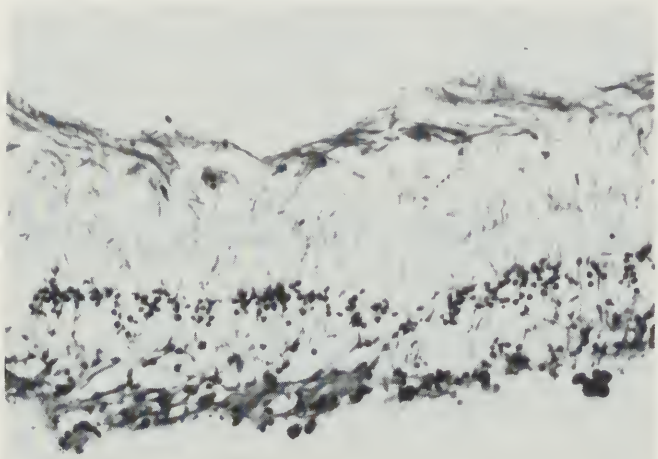


Figure 19. Hallervorden-Spatz disease. Temporal mid peripheral retina with total loss of the photoreceptor cell layer. Pigmented cells are present in the outer aspect of the retina (hematoxylin and eosin, × 220).

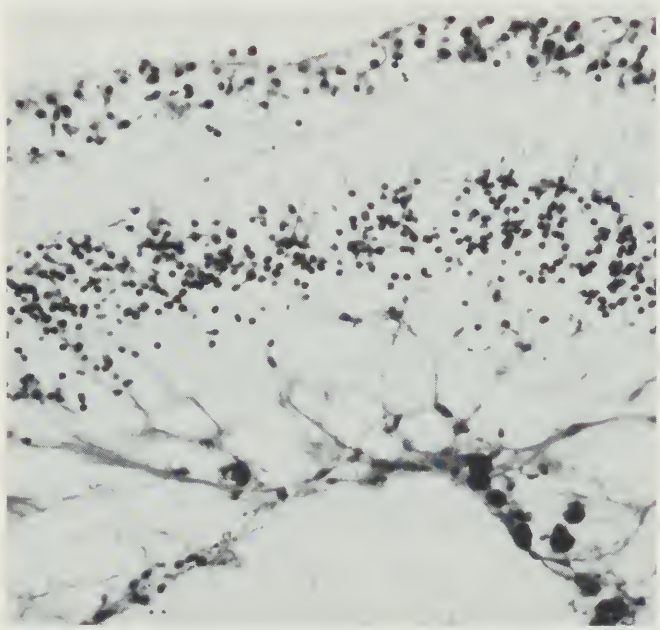


Figure 20. Hallervorden-Spatz disease. Macular area with loss of photoreceptor cell layer and presence of pigmented cells in outer retina (periodic acid-Schiff, × 525).

pole (Figures 19, 20). Pigmented cells were present in the outer retina in an annular configuration in the parafoveal area and corresponded to the bull's eye configuration seen in the macula. The retinal pigment epithelial cells were distended and contained clumped pigment (Figure 21). Hyperplastic retinal pigment epithelial cells had migrated into the retina in a perivascular location at the equator (Figure 22).

In an ultrastructural study by Luckenbach *et al.*[79] the retinal pigment epithelium varied in size and contained very large, single membrane-bound aggregates composed of complex melanolipofuscin granules (Figures 23–25). The cells that had migrated into the outer retinal layers were identified as macrophages (Figure 26) and contained similar melanolipofuscin cytosomes. These cells correlated with the macular annulus and the flecks seen on ophthalmoscopy. The cells around the blood vessels containing normal melanin pigment were identified as retinal pigment epithelial cells and corresponded to the bone spicules observed clinically (Figure 27).

The pathogenesis of Hallervorden-Spatz syndrome is unknown, but a common feature appears to be an abnormal accumulation of lipofuscin in certain susceptible tissues. Several investigators conducted histochemical and ultrastructural studies and concluded that the pigment found in the basal ganglia is primarily lipofuscin and neuromelanin.[81–83]

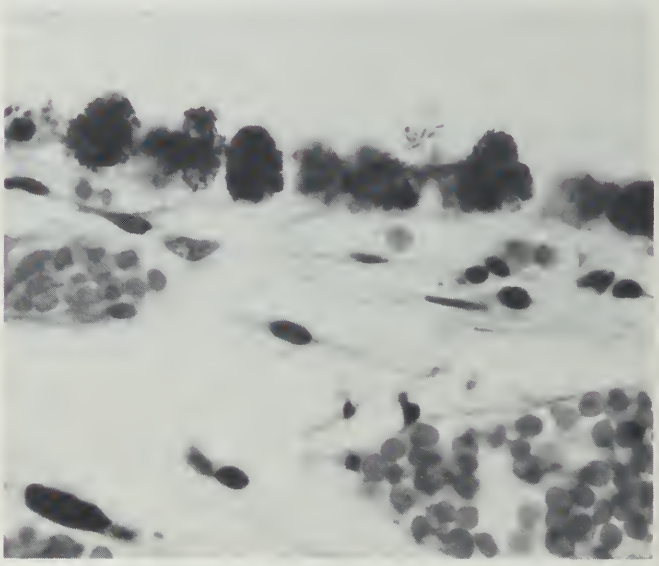


Figure 21. Hallervorden-Spatz disease. Posterior area showing much distension of the RPE cells, which vary in size and shape and contain large, round pigment aggregates (hematoxylin and eosin, × 900).

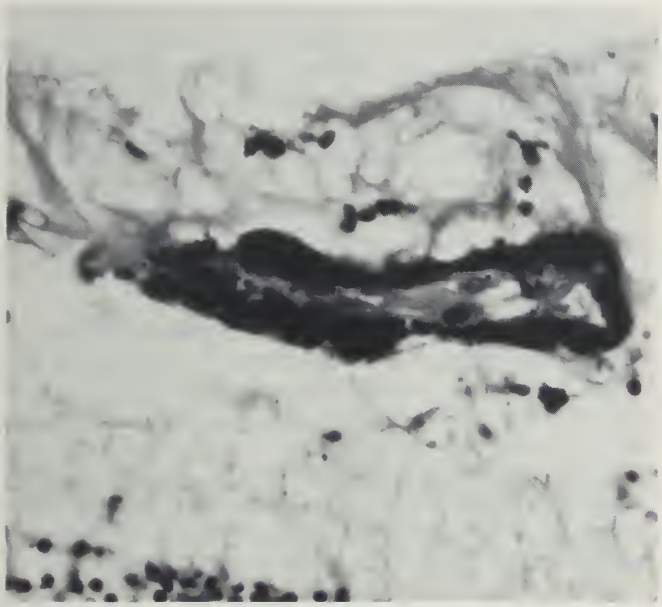


Figure 22. Hallervorden-Spatz disease. Equatorial area showing retinal blood vessel surrounded by pigmented cells (periodic acid-Schiff, × 280).

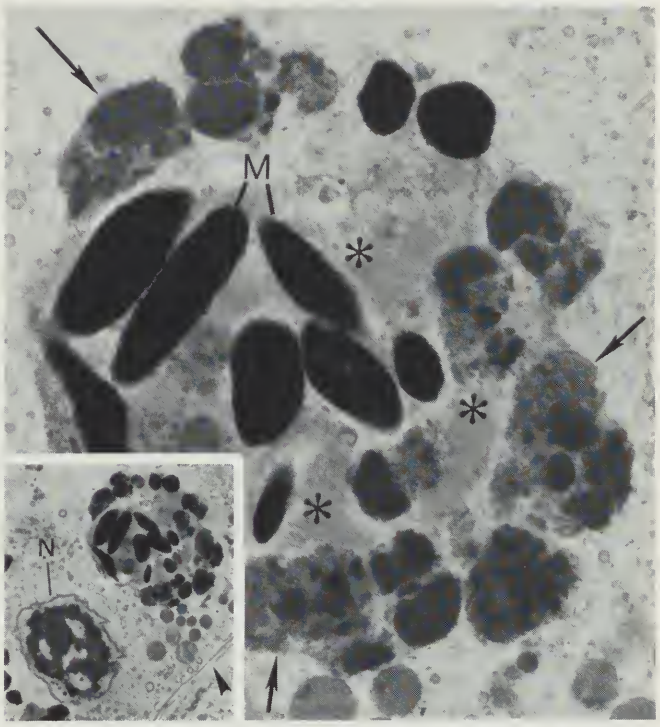


Figure 23. RPE with a giant, single-membrane-bound melanolipofuscin aggregate 35 μm in diameter. It is composed of cigar-shaped melanin granules (M) and pleomorphic lipofuscin granules (arrows) embedded in a membranous lipofuscin (asterisks) background (× 25,000). Insets: pigment aggregate (arrowhead) is larger than the nucleus (N) of the RPE cell (top inset, phase-contrast, paraphenylenediamine, × 2,000; bottom inset, × 6,200).

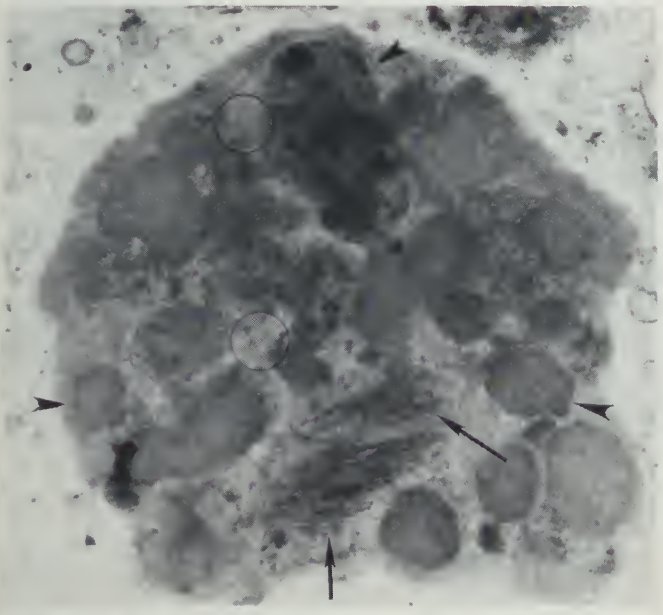


Figure 24. Hallervorden-Spatz disease. RPE with pigment aggregate that measures 1.4 μm in diameter and is composed of lipofuscin in the form of membranous (circled areas), pleomorphic lipofuscin granules (arrowheads), and partially degraded melanin granules (arrows) (× 40,000).

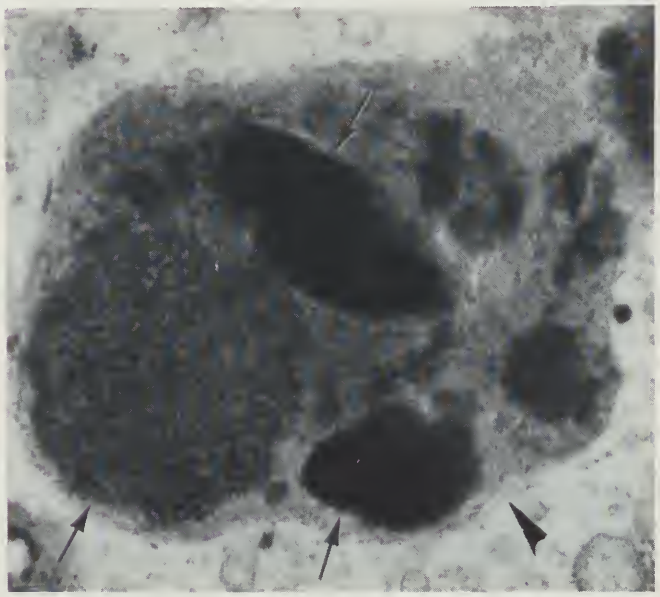


Figure 25. Hallervorden-Spatz disease. RPE with single-membrane-bound (arrowhead) melanolipofuscin aggregate that measures 1.4 μm in diameter and contains partially degraded melanin (arrows) in a background of finely granular lipofuscin and dense pleomorphic lipofuscin granules (× 40,000).

2. *Miscellaneous* other disorders that may present with a pigmentary retinopathy and central nervous system manifestations are listed in the Table.

Diseases Associated with Deafness

1. *Bardet-Biedl syndrome*, an autosomal recessive condition, is characterized by pigmentary retinopathy with an extinct electroretinogram, hypopigmentation, obesity, and polydactyly. It is distinguished from the Laurence-Moon syndrome by the absence of spastic paraplegia, and the presence of obesity and polydactyly.

The pigmentary retinopathy present in Bardet-Biedl syndrome is variable in appearance. A typical pigmentary retinopathy is seen in 15 percent of the cases; but a salt-and-pepper retinopathy, pigmentary maculopathy, retinitis puncta albescens, choroidal sclerosis, or a normal fundus may be present.[4]

2. *Laurence-Moon syndrome*, another autosomal recessive disorder, is characterized by mental retardation, spastic paraplegia, hypopigmentation, and a pigmentary retinopathy.

Ophthalmoscopic features include widespread loss of the retinal pigment epithelium and atrophy of the choroid similar to that found in choroideremia.[84] A histopathologic study of a case on file at the Wilmer Eye Pathology Laboratory showed widespread loss of the retinal pigment epithelium, choroid, and outer retinal layers.

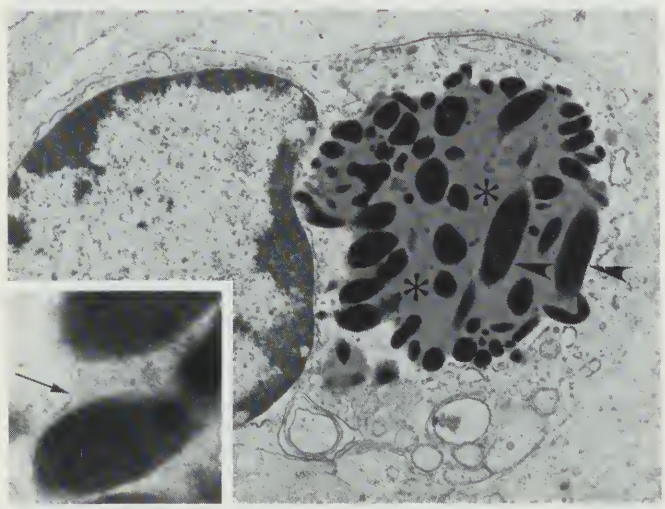


Figure 26. Hallervorden-Spatz disease. Macrophage in outer retina contains giant melanolipofuscin aggregate that measures 3.8 μm in diameter. The aggregate is composed of cigar-shaped melanin granules (arrowheads) embedded in a granular lipofuscin matrix (asterisks) (× 15,300). Inset: the aggregate is bounded by a single membrane (arrow) (× 60,000).

3. *Usher's syndrome*, an autosomal recessive condition is characterized by typical retinitis pigmentosa and sensorineural deafness. There is both interfamilial and intrafamilial variation in the severity of the ocular and audiologic findings. Also, vestibular ataxia, psychosis,[85] and mental retardation[86] may occur. Genetic heterogeneity in Usher's syndrome has been suggested by many authors[86–90] and various classifications of the disorder have been suggested, primarily based on the age at onset of the pigmentary retinopathy and the severity of the hearing loss.

Bateman *et al.*[89] stressed the variability of the ocular manifestations in Usher's syndrome. Typically, Usher's patients have a pigmentary retinopathy identical to that seen in RP, but Bateman *et al.*[89] described one patient with a sensorineural hearing loss and crystalline retinal deposits. Additionally, the association of macular retinal pigment epitheliopathy and hearing loss has been reported as a genetic syndrome,[91,92] but the genetic nature of this disorder remains to be determined.[93]

No ocular pathologic studies have been reported on patients with Usher's syndrome, and its etiology is unknown. However, abnormalities of axoneural micro-

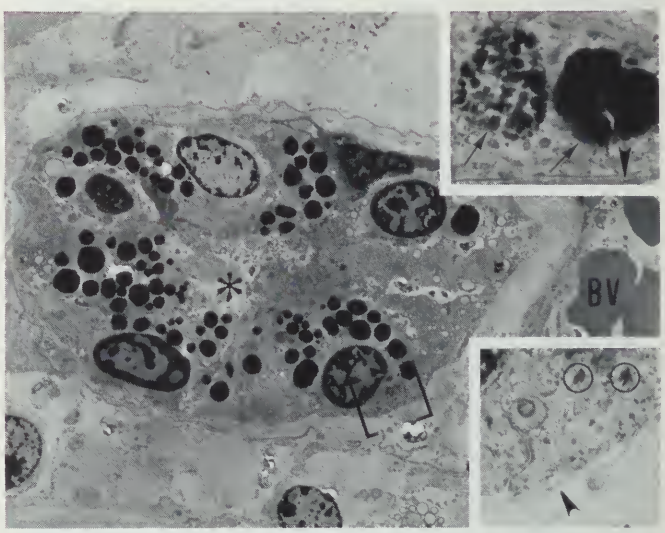


Figure 27. Hallervorden-Spatz disease. Hyperplastic RPE cells arranged in an acinar pattern adjacent to a retinal blood vessel (BV). Cells contain round melanin granules, have microvilli at the apex facing the lumen (asterisk), have basement membrane at the base (bracketed area), and are joined by complex intercellular attachments (bracketed area) (× 3,500). Top inset: vascular pericyte is surrounded by basement membrane (arrowhead) and contains pleomorphic lipofuscin granules (× 39,170). Bottom inset: higher-power view of the basement membrane at the base of the cells and the complex intercellular attachments (circled areas) (× 17,000). (Figures 19–27, From Luckenbach, M.W.; Green, W.R.; Miller, N.R.; Moser, H.W.; Clark, A.W.; and Tennekoon, G. "Ocular Clinicopathologic Correlation of Hallervorden-Spatz Syndrome with Acanthocytosis and Pigmentary Retinopathy." *Am J Ophthalmol* 95(1983):369.)

Table.

Systemic Disorders with Fundus Abnormalities Resembling Retinitis Pigmentosa

Disorder	Inheritance/ Etiology	Primary Manifestations
Abnormal lipid & lipoprotein metabolism		
Abetalipoproteinemia	Autosomal recessive	Acanthocytosis Ataxia Abetalipoproteinemia
Hypobetalipoproteinemia	Autosomal dominant	Acanthocytosis Lipid abnormalities
Neuronal ceroid lipofuscinosis	Autosomal recessive	Mental deterioration Seizures
Refsum's disease	Autosomal recessive	Ataxia Polyneuropathy Increased plasma phytanic acid High cerebrospinal fluid protein
Infantile phytanic acid storage disease	Autosomal recessive	Hypotonia Neonatal liver dysfunction Dysmorphic features
Abnormal carbohydrate metabolism		
MPS type I-H (Hurler)	Autosomal recessive	Skeletal abnormalities Cloudy corneas Mental retardation
MPS type I-S (Scheie)	Autosomal recessive	Corneal clouding Stiff joints Aortic valve disease
MPS type II (Hunter)	Autosomal recessive	Mental retardation Skeletal abnormalities Hepatosphenomegaly
MPS type III A&B (Sanfilippo)	Autosomal recessive	Mental retardation Deafness

Diseases without a Known Metabolic Defect and Central Nervous System Disease

Hallervorden-Spatz	Autosomal recessive	Extrapyramidal dysfunction Basal ganglia symptoms Dementia
Pelizaeus-Merzbacher	X-linked recessive	Spasticity Cerebellar ataxia Dementia
Friedrich's ataxia	Autosomal recessive	Posterior column disease Nystagmus, ataxia
Retinitis pigmentosa with pallidal degeneration	Autosomal recessive (?)	Extrapyramidal rigidity Dysarthria
Saldmo syndrome	Autosomal recessive (?)	Cerebellar ataxia Skeletal abnormalities

Diseases without a Known Metabolic Defect and Deafness

Disorder	Inheritance/ Etiology	Primary Manifestations
Usher syndrome	Autosomal recessive	Deafness
Laurence-Moon syndrome	Autosomal recessive	Mental retardation Spastic paraplegia Hypogenitalism
Bardet-Biedl syndrome	Autosomal recessive	Mental retardation Polydactyly Obesity Hypogenitalism
Cockayne's syndrome	Autosomal recessive	Dwarfism Mental retardation
Alström's syndrome	Autosomal recessive (?)	Obesity Diabetes mellitus Nystagmus
McGovern's syndrome	Autosomal recessive (?)	Stationary Congenital hearing loss
Flynn-Aird syndrome	Autosomal dominant	Cataracts, ataxia Dementia, epilepsy Cutaneous changes
RP with muscle atrophy	Unknown	Progressive muscle wasting & weakness
RP with spastic diplegia	Autosomal recessive (?)	Spastic diplegia

Miscellaneous Diseases with Manifestations Similar to Retinitis Pigmentosa

Syphilis	Treponema pallidum	The great imitator
Trauma	Multiple	Variable
RP with megacolon	Polygenic (?)	Polar cataract, strabismus Nystagmus
RP with muscular dystrophy	Unknown	Proximal dystrophy Cataracts
Kartagener's syndrome	Autosomal recessive	Dextrocardia, bronchiectasis Sinusitis
RP with retinal hemorrhages	Autosomal recessive (?)	One case had glial tissue at the disk
Turner syndrome	45,X (usually)	Infertility Short stature Shield chest Low hairline
Imidazone aminoaciduria	Autosomal recessive	Seizures Mental retardation Excess cornosine & anserine excretion
Senior-Loken syndrome	Autosomal recessive	Juvenile nephronophthisis

tubular structures and the presence of compound nasal cilia in Usher's syndrome patients have been reported.[94] Ciliated structures are common to the myoid area of photoreceptors and the organ of Corti of the ear. Newsome and Nussenblatt[95] reported that five out of six patients with Usher's syndrome showed *in vitro* evidence of cell mediated reactivity to retinal S-antigen and suggested a possible autoimmune component to the disease.

4. *Cockayne's syndrome*, an autosomal recessive condition, is characterized by the onset of progressive developmental and mental retardation, deafness, optic atrophy, and pigmentary degeneration of the retina, after a period of apparently normal development.[96,97] The etiology of the condition is unknown, and despite its clinical similarity to other neuroretinal degenerations due to metabolic storage diseases, no metabolic or storage defects have been found. Recently it has been shown that cultured fibrocytes and lymphocytes from patients with Cockayne's syndrome are abnormally sensitive to ultraviolet light;[98] this finding may be of pathogenetic importance and explains the abnormal skin photosensitivity these patients manifest.

A salt-and-pepper retinopathy is one of the most consistent findings in Cockayne's syndrome.[99] Additional ocular manifestations include cataract, nystagmus, pupillary unresponsiveness to mydriatics and light, and corneal ulcers.[99,100]

Similar retinal changes have been described in two light microscopic studies of eyes from patients with Cockayne's syndrome.[100,101] Levin and coworkers[100] found widespread atrophy of the nerve fiber layer and ganglion cell layer, and atrophy of the optic nerve. The inner plexiform and inner nuclear layers were normal, the outer nuclear layer had a reduced number of cells and there was atrophy of inner and outer photoreceptor segments (Figure 28A). The retinal pigment epithelium was intact but there were areas of irregular hypopigmentation and hyperpigmentation. Pigment-laden cells were present in the retina and in the subretinal space of the peripheral retina (Figure 28B). Electron microscopic examination disclosed large amounts of lipofuscin in the retinal pigment epithelial cells.

5. *Alström's disease* is a rare autosomal recessive condition characterized by pigmentary retinal degeneration, obesity, diabetes mellitus, neurosensory deafness, and progressive renal failure. The pigmentary retinopathy is severe and leads to extinction of the ERG and blindness in childhood. Other features of Alström's syndrome include acanthosis nigricans, baldness, hyperuricemia, hypertriglyceridemia, kyphoscoliosis, hyperostosis frontalis interna, and, in males, hypogonadism with normal secondary sexual characteristics.[102]

Sebag and coworkers[102] described the histopathologic and ultrastructural findings in a patient with Alström's disease and a "bone spicule" pigmentary retinopathy. In their patient, the ganglion cell and inner and outer nuclear layers were markedly hypocellular. Rod and cone outer segments were absent and clumps of pigment-laden macrophages were present in the retina. The optic nerve was atrophic and optic nerve head drusen were present. The electron microscopic study demonstrated "melanolysosomes" in the macular region.

6. *Miscellaneous* other disorders that may present with a pigmentary retinopathy and deafness are listed in the Table.

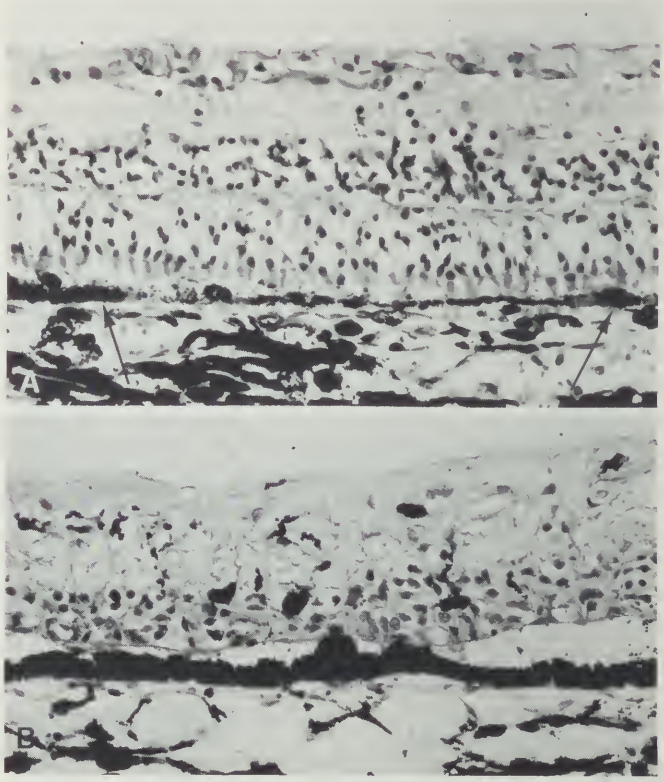


Figure 28. Cockayne syndrome. **A** Higher-power view of parafoveal area showing near-total loss of nerve fiber and ganglion cell layers (asterisk). Outer nuclear layer may have a slight reduction in number of nuclei. There is total loss of outer segments of photoreceptors. Inner segments are greatly reduced, and those that remain are stubby. RPE is continuous but shows areas of hyperpigmentation (arrows) (Fontana, × 300). **B** Equatorial area showing near-total photoreceptor cell loss, RPE hypertrophy, and pigment migration into retina (Fontana, × 315). E.P. 41071. (From Levine, P.S.; Green, W.R.; Victor, D.L.; and MacLean, A.L. "Histopathology of the Eye in Cockayne's Syndrome." *Arch Ophthalmol* 101(1983):1093.)

Miscellaneous Diseases

1. *Kearns-Sayre syndrome* Barnard and Scholz[103] reported the association of ophthalmoplegia and pigmentary degeneration of the retina, and Kearns and Sayre[104] observed the additional feature of cardiomyopathy. Other, less consistent features, include: weakness of facial and pharyngeal musculature, deafness, small stature, electroencephalographic changes, and an increase in cerebrospinal fluid protein.[105]

The pigmentary retinopathy in this disorder is usually greatest in the macular and peripapillary zones and consists of a diffuse mottling of the pigment epithelium.[105] Eagle and coworkers[106] have pointed out the differences between the retinal degeneration in Kearns-Sayre syndrome and those of primary RP. They observed the degeneration of the retinal pigment epithelium and photoreceptor cells to be most marked in the posterior pole (Figure 29A). Gross examination disclosed marked irregular clumping of the retinal pigment epithelium (Figure 29B). Scanning electron microscopy showed prominent irregularities and enlargement of the retinal pigment epithelium (Figures 29C, 30A) and transmission electron microscopy showed irregular conglomerates of melanin granules (Figure 30B). These investigators thought that the retinal pigment epithelium may be the site of the primary defect in this retinal degeneration.

2. *Jeune's syndrome* (asphyxiating thoracic dystrophy, thoracic pelvic phalangeal dystrophy), a rare autosomal recessive disorder, is characterized by a dwarfing skeletal dysplasia, respiratory insufficiency in in-

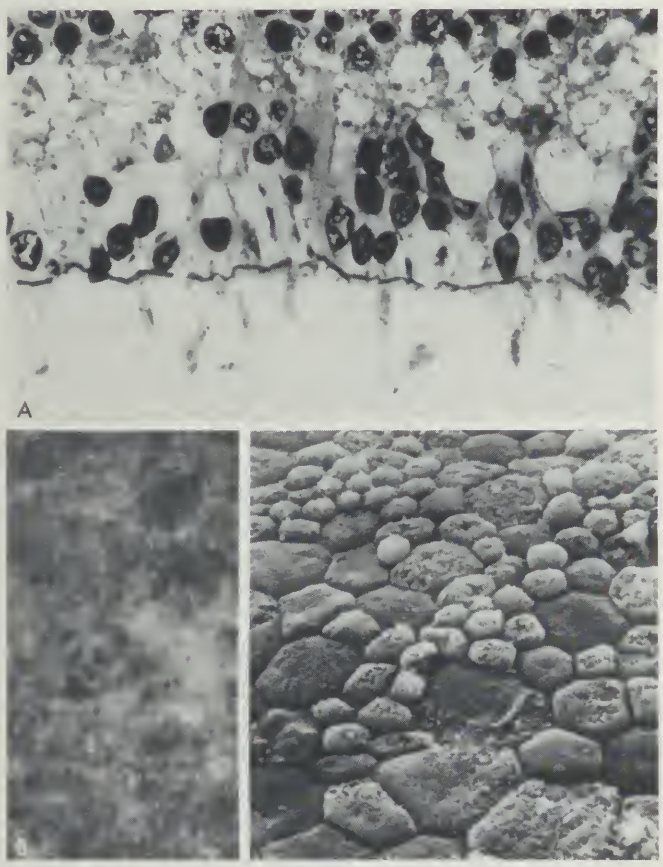


Figure 29. Kearns-Sayre syndrome. **A** Paramacular retina shows extensive loss of photoreceptors and atrophy of outer nuclear layer (toluidine blue, × 400). **B** Macrophoto of RPE flat preparation shows prominent "salt-and-pepper" pattern of pigment clumping and atrophy (× 60). **C** Scanning electron micrograph shows marked variation in size and shape of equatorial RPE cells (× 640). (From Eagle, R.C., Jr.; Hedges, T.R.; and Yanoff, M. "The Atypical Pigmentary Retinopathy of Kearns-Sayre Syndrome. A Light and Electron Microscopy Study." *Ophthalmology* 89(1982):1433.)

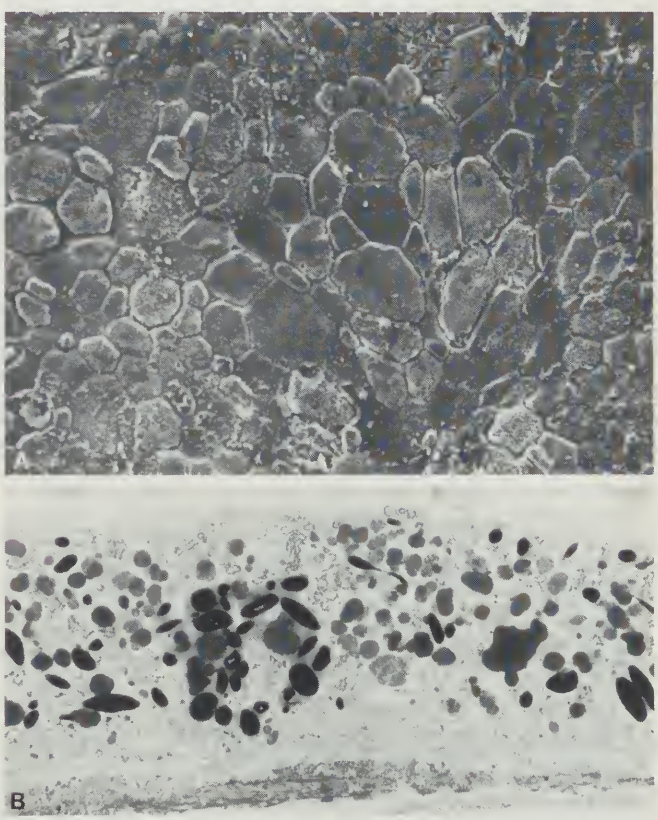


Figure 30. **A** Scanning electron micrograph showing flattened, irregular, polygonal RPE cells (× 460). **B** Transmission electron micrograph of RPE, with loss of normal polarity of apical melanin and basal lipofuscin. A large, irregular conglomerate of residual melanin granules is present left of center (× 3600). (From Eagle, R.C., Jr.; Hedges, T.R.; and Yanoff, M. "The Atypical Pigmentary Retinopathy of Kearns-Sayre Syndrome. A Light and Electron Microscopy Study." *Ophthalmology* 89(1982):1433.)

fancy, progressive renal failure, portal tract fibrosis, and a pigmentary retinopathy. Many of the patients with this disease die in infancy from severe respiratory insufficiency, but several patients have been reported to survive to adulthood.

Pigmentary retinopathy is one of the most consistent findings in Jeune's syndrome and usually is described as a mid-peripheral zone of retinal pigment epithelial disturbance.[107,108] The ERG shows markedly diminished photopic and scotopic amplitudes, and serial ERGs done in one sibship suggest that the retinal dystrophy is progressive.[109]

Allen *et al.*[108] reported the light microscopic findings in one patient with Jeune's syndrome. They noted that the retinal pigment epithelium was altered only mildly, with variation in cell size and shape. There was loss of the normal apical pigment granule concentration and variation in pigment granule size. The outer nuclear and photoreceptor layers were strikingly abnormal, with considerable loss of the photoreceptor cells. No intraretinal migration of pigment-containing cells was found.

3. *Miscellaneous* additional disorders that may resemble retinitis pigmentosa are listed in the Table.

Conclusion

The systemic diseases that may present a clinical picture similar to RP are many and heterogeneous. The response of the retinal pigment epithelium photoreceptor complex to various metabolic abnormalities may lead to a similar ophthalmoscopic and histopathologic appearance. However, associated systemic and ocular abnormalities, laboratory and electrophysiologic data, and electron microscopy of biopsy specimens usually allows the differentiation of these disorders from RP.

References

1. Bassen, F.A. and Kornzweig, A.L. "Malformation of the Erythrocytes in a Case of Atypical Retinitis Pigmentosa." *Blood* 5(1950):381.

2. Lamy, M.; Frezal, J.; Polonovski, J.; and Rey, J. "L'Absence congenitale de beta-lipoproteines." *C R Soc Biol (Paris)* 154 (1960):1974.

3. Mabry, C.C.; DiGeorge, A.M.; and Auerbach, V.H. "Studies Concerning the Defect in a Patient with Acanthocytosis." *Clin Res* 8(1960):371.

4. Francois, J. "Metabolic Tapetoretinal Degenerations." *Surv Ophthalmol* 26(1982): 293.

5. Kornzweig, A.L. and Bassen, F.A. "Retinitis Pigmentosa, Acanthocytosis, and Heredodegenerative Neuromuscular Disease." *Arch Ophthalmol* 58(1957):183.

6. Gouras, P.; Carr, R.E.; and Gunkel, R.D. "Retinitis Pigmentosa in Abetalipoproteinemia: Effects of Vitamin A." *Invest Ophthalmol* 10(1971):784.

7. Wolff, O.H.; Lloyd, J.K.; and Tonks, E.L. "A-B-lipoproteinemia with Special Reference to the Visual Defect." *Exp Eye Res* 3(1964):439.

8. Sobrivilla, L.A.; Goodman, M.L.; and Kane, C.A. "Demyelinating Central Nervous System Disease, Macular Atrophy, and Acanthocytosis (Bassen-Kornzweig Syndrome)." *Am J Med* 37(1964):821.

9. Jampel, R.S. and Falls, H.F. "Atypical Retinitis Pigmentosa, Acanthocytosis, and Heredodegenerative Neuromuscular Disease." *Arch Ophthalmol* 59(1958):818.

10. Lamy, M.; Frezal, J.; Polonovski, J.; and Rey, J. "L'Absence congenitale de beta-lipoproteines." *Presse Med* 69(1961):1511.

11. Sperling, M.A.; Hiles, D.A.; and Kennerdell, J.S. "Electroretinographic Responses Following Vitamin A Therapy in A-beta-lipoproteinemia." *Am J Ophthalmol* 73(1972):342.

12. Muller, D.P.; Harris, J.T.; and Lloyd, J.K. "Vitamin E Therapy in Abetalipoproteinemia." *Arch Dis Child* 45(1970):715.

13. Muller, D.P.; Lloyd J.K.; and Bird, A.C. "Long-term Management of Abetalipoproteinemia. Possible Role for Vitamin E." *Arch Dis Child* 52(1977):209.

14. Robison, W.G., Jr.; Kuwabara, T.; and Bieri, J.G. "Vitamin E Deficiency and the Retina: Photoreceptor and Pigment Epithelial Changes." *Invest Ophthalmol Vis Sci* 18(1979):683.

15. Robison, W.G.; Kuwabara, T.; and Bieri, J.G. "Deficiencies of Vitamin E and A in the Rat: Retinal Damage and Lipofuscin Accumulation." *Invest Ophthalmol Vis Sci* 19(1980):1030.

16. Howard, L.; Ovesen, L.; Satya-Murti, S.; and Chu, R. "Reversible Neurological Symptoms Caused by Vitamin E Deficiency in a Patient with Short Bowel Syndrome." *Am J Clin Nutri* 36(1982):1243.

17. Von Sallmann, L.; Gelderman, A.H.; and Laster, L. "Ocular Histopathologic Changes in a Case of Abetalipoproteinemia (Bassen-Kornzweig Syndrome)." *Doc Ophthalmol* 26(1969):451.

18. Mars, H.; Lewis, L.A.; Robertson, A.L.; Butkus, A.; and Williams, G.H., Jr. "Familial Hypobetalipoproteinemia: A Genetic Disorder of Lipid Metabolism with Nervous System Involvement." *Am J Med* 46(1969):886.

19. Levy, I.S. "Refsum's Syndrome." *Trans Ophthalmol* Soc UK 90(1970):181.

20. Fosbrooke, A.; Choksey, S.; and Wharton, B. "Familial Hypobetalipoproteinemia." *Arch Dis Child* 48(1973):729.

21. Yee, R.D.; Herbert, P.N.; Bergsma, D.R.; and Bierma, J.J. "Atypical Retinitis Pigmentosa in Familial Hypobetalipoproteinemia." *Am J Ophthalmol* 82(1976):64.

22. Van Buchem, F.S.P.; Pol, G.; de Gier, J.; Pries, C.; and Bottcher, C.J. "Congenital B-lipoprotein Deficiency." *Am J Med* 40(1966):794.

23. Salt, H.B.; Wolff, O.H.; Lloyd, J.K.; Fosbrooke, A.S.; Cameron, A.H.; and Hubble, D.V. "On Having No Betalipoprotein: A Syndrome Comprising A-beta-lipoproteinemia, Acanthocytosis, and Steatorrhoea." *Lancet* 2(1960):325.

24. Cottrill, C.; Glueck, C.J.; Leuba, V.; Millett, F.; Puppione, D.; and Brown, W.V. "Familial Homozygous Hypobetalipoproteinemia." *Metabolism* 23(1974):779.

25. Biemer, J.J. and McCammon, R.E. "The Genetic Relationship of Abetalipoproteinemia and Hypobetalipoproteinemia. A Report of the Occurrences of both Diseases within the Same Family." *J Lab Clin Med* 85(1975):556.

26. Hooft, C.; De Laey, P.; Herpol, J.; de Loore, F.; and Verbeeck, J. "Familial Hypolipidemia and Retarded Development without Steatorrhea." *Helv Paediatr Acta* 17(1962):1.

27. Francois, J. and De Blond, R. "Degenerescence tapeto-retienne associee a un syndrome hypolipidemique." *Acta Genet Med Gemellol (Roma)* 12(1963):145.

28. Zeman, W. and Dyken, P. "Neuronal Ceroid-lipofuscinosis (Batten's disease): Relationship to Amaurotic Familial Idiocy?" *Pediatrics* 44(1969):570.

29. Zeman, W. "Historical Development of the Nosological Concept of Amaurotic Familial Idiocy." In *Handbook of Clinical Neurology*, Vol. 10. P.J. Vinken and G.W. Bruyn (eds). Amsterdam: North

Holland Publ., 1970, pp. 212–32.

30. Santavuori, P.; Haltia, M.; Rapola, J.; and Raitta, C. "Infantile Type of So-called Neuronal Ceroid-lipofuscinosis. 1. A Clinical Study of 15 Patients." *J Neurol Sci* 18(1973):257.

31. Hagberg, B.; Sourander, P.; and Svennerholm, L. "Late Infantile Progressive Encephalopathy with Disturbed Polyunsaturated Fat Metabolism." *Acta Paediatr Scand* 57(1908):495.

32. Haltia, M.; Rapola, J.; Santavuori, P.; and Keranen, A. "Infantile Type of So-called Neuronal Ceroid-lipofuscinosis. 2. Morphological and Biochemical Studies." *J Neurol Sci* 18(1973):269.

33. Zeman, W. "Batten's Disease: Ocular Features, Differential Diagnosis and Diagnosis by Enzyme Analysis." *Birth Defects* 12(3)(1976):441.

34. Armstrong, D.; Dimmitt, S.; and Van Wormer D.E. "Studies in Batten Disease. I. Peroxidase Deficiency in Granulocytes." *Arch Neurol* 30(1974):144.

35. Pilz, H.; O'Brien, J.S.; and Heipertz, R. "Human Saliva Peroxidase: Microanalytical Isoelectric Fractionation and Properties in Normal Persons and in Cases with Neuronal Ceroid-lipofuscinosis." *Clin Biochem* 9(1976):85.

36. Sumi, S.M. and Farrell, D.F. "Electron Microscopy of Skin Biopsy and Leukocyte Peroxidase Assay in the Diagnosis of Juvenile Neuronal Ceroid Lipofuscinosis." *Neurology* 26(1976):364.

37. Wolfe, L.S.; Kin N.M.; Baker, R.R.; Carpenter, S.; and Andermann, F. "Identification of Retinoyl Complexes as the Autofluorescent Component of the Neuronal Storage Material in Batten Disease." *Science* 195(1977):1360.

38. Zeman, W. and Siakotos, A.N. "The Neuronal Ceroid Lipofuscinosis." In *Lysosomes and Storage Diseases.* H.G. Hers and F. Van Hoff (eds). New York: Academic Press, 1973, pp. 519–51.

39. Schocket, S.S., Jr.; Font, R.L.; and Morris, H.H., III. "Jansky-Bielschowsky Form of Neuronal Ceroid-lipofuscinosis. Ocular Pathology of the Batten-Vogt Syndrome." *Arch Ophthalmol* 98(1980):1083.

40. Goebel, H.H.; Zeman, W.; and Damaske, E. "An Ultrastructural Study of the Retina in the Jansky-Bielschowsky Type of Neuronal Ceroid Lipofuscinosis." *Am J Ophthalmol* 83(1977):70.

41. Carpenter, S.; Karpati, G.; and Andermann, F. "The Ultrastructural Characteristics of the Abnormal Cytosomes in Batten-Kufs' Disease." *Brain* 100(1977):137.

42. Ramsey, M.S. and Fine, B.S. "Chloroquine Toxicity in the Human Eye: Histopathologic Observations by Electron Microscopy." *Am J Ophthalmol* 73(1972):229.

43. Roizin, L.; Schneider, J.; Willson, N.; Lin, J.C.; and Mullen, C. "Effects of Prolonged LSD-25 Administration upon Neurons of Spinal Cord Ganglia Tissue Cultures." *J Neuropathol Exp Neurol* 33(1974):212.

44. Spalton, D.J.; Taylor, D.S.I.; and Sanders, M.D. "Juvenile Battens' Disease: An Ophthalmological Assessment of 26 Patients." *Br J Ophthalmol* 64(1980):726.

45. Manschot, W.A. "Retinal Histology in Amaurotic Idiocies and Tapeto-retinal Degenerations." *Ophthalmologica* 156(1968):28.

46. Göttinger, W. and Minauf, M. "Netzhautveränderungen bei juveniler amaurotischer Idiote. Ophthalmoskopisch und histopathologische Befunde." *Klin Monatsbi Augenheilkd* 159(1971):532.

47. Goebel, H.H.; Fix, J.D.; and Zeman, W. "The Fine Structure of the Retina in Neuronal Ceroid-lipofuscinosis." *Am J Ophthalmol* 77(1974):25.

48. Refsum, S. "Heredopathia Atactica Polyneuritiformis; Familial Syndrome not Hitherto Described; Contribution to Clinical Study of Hereditary Diseases of Nervous System." *Acta Psychiatr Scand [Suppl]* 38(1946):1.

49. Steinberg, D.; Herndon, J.H.; Jr.; Uhlendorf, B.W.; Mize, C.E.; Avigan, J.; and Milne, G.W. "Refsum's Disease: Nature of the Enzyme Defect." *Science* 156(1967):1740.

50. Herndon, J.H., Jr.; Steinberg, D.; Uhlendorf, B.W.; and Fales, H.M. "Refsum's Disease: Characteristics of the Enzyme Defect in Cell Culture." *J Clin Invest* 48(1969):1017.

51. Steinberg, D.; Mize, C.E.; Herndon, J.H., Jr.; Fales, H.M.; Engel, W.K.; and Vroom, F.Q. "Phytanic Acid in Patients with Refsum's Syndrome and Response to Dietary Treatment." *Arch Intern Med* 125(1970):75.

52. Billings, J.J.; O'Callaghan, J.; and O'Day, K. "Refsum's Syndrome: Heredopathia Atactica Polyneuritiformis." *Trans Ophthalmol Soc Aust* 17(1957):131.

53. Reese, H. and Bareta, J. "Heredopathia Atactica Polyneuritiformis." *J Neuropathol Exp Neurol* 9(1957):385.

54. Endström, R.; Gröntoft, O.; and Sandring, H. "Refsum's Disease. Three Siblings, One Autopsy." *Acta Psychiatr Scand* 34(1959):40.

55. Alexander, W.S. "Phytanic Acid in Refsum's Syndrome." *J Neurol Neurosurg Psychiatry* 29(1966):412.

56. Levy, I.S. "Refsum's Syndrome." *Trans Ophthalmol Soc UK* 90(1970):181.

57. Fryer, D.G.; Winkleman, A.C.; Ways, P.O.; and Swanson, A.G. "Refsum's Disease. A Clinical and Pathological Report." *Neurology* 21(1971):162.

58. Toussaint, D. and Danis, P. "An Ocular Pathologic Study of Refsum's Syndrome." *Am J Ophthalmol* 72(1971):342.

59. Scotto, J.M.; Hadchouel, M.; Odievre, M.; *et al.* "Infantile Phytanic Acid Storage Disease, A Possible Variant of Refsum's Disease: Three Cases Including Ultrastructural Studies of the Liver." *J Inherited Metab Dis* 5(1982):83.

60. Boltshauser, E.; Spycher, M.A.; Steinman, B.; *et al.* "Infantile Phytanic Acid Storage Disease: A Variant of Refsum's Disease?" (abstracted). *Eur J Pediatr* 139(1982):317.

61. Weleber, R.G.; Tongue, A.C.; Kennaway, N.G.; Budden, S.S.; and Buist, N.R. "Ophthalmic Manifestations of Infantile Phytanic Acid Storage Disease." *Arch Ophthalmol* 102(1984):1317.

62. Gills, J.P.; Hobson, R.; Henley, W.B.; and McCusick, V.A. "Electroretinography and Fundus Oculi Findings in Hurler's Disease and Allied Mucopolysaccharidoses." *Arch Ophthalmol* 74(1965):596.

63. Lindsay, S.; Reilly, W.A.; Gotham, F.J.; and Skahen, R. "Gargoylism, Study of Pathologic Lesions and Clinical Review of 12 Cases." *Am J Dis Child* 76(1948):239.

64. Newell, F.W. and Koistinen, A. "Lipochondrodystrophy (Gargoylism). Pathologic Findings in Five Eyes of Three Patients." *Arch Ophthalmol* 53(1955):45.

65. Chan, C.C.; Green, W.R.; Maumenee, I.H.; and Sack, G.H., Jr. "Ocular Ultrastructural Studies of Two Cases of the Hurler Syndrome (Systemic Mucopolysaccharidosis I-H)." *Ophthalmol Pediatr Genet* 2(1983):3.

66. Goldberg, M.F. and Duke, J.R.: "Ocular Histopathology in Hunter's Syndrome. Systemic Mucopolysaccharidosis Type II." *Arch Ophthalmol* 77(1967):503.

67. Topping, T.M.; Kenyon, K.R.; Goldberg, M.F.; and Maumenee, A.E. "Ultrastructural Ocular Pathology of Hunter's Syndrome. Systemic Mucopolysaccharidosis Type II." *Arch Ophthalmol* 86(1971):164.

68. McDonnell, J.M.; Green, W.R.; and Maumenee, I.H. "Ocular Histopathology of Systemic Mucopolysaccharidosis, Type II-A (Hunter syndrome, Severe)." *Ophthalmology* 92(1985):1772.

69. Del Monte, M.A.; Maumenee, I.H.; Green, W.R.; and Kenyon, K.R. "Histopathology of Sanfilippo Syndrome." *Arch Ophthalmol* 101(1983):1255.

70. Jensen, O.A. "Mucopolysaccharidosis Type 3 (Sanfilippo's Syndrome). Histochemical Examination of the Eyes and Brain with a Survey of the Literature." *Acta Pathol Microbiol Scand [A]* 79(1971):257.

71. Vogel, M.H.; Müller, K.M.; and Witting, C. "Ocular Histopathology in Mucopolysaccharidosis III (Sanfilippo)." *Ophthalmologica* 169(1974):311.

72. Lavery, M.A.; Green, W.R.; Jabs, E.W.; Luckenbach, M.W.; and Cox, J.L. "Ocular Histopathology and Ultrastructure of Sanfilippo's Syndrome, Type III-B." *Arch Ophthalmol* 101(1983):1263.

73. Klein, U.; Kresse, H.; and Van Figura, K. "Sanfilippo Syndrome Type C: Deficiency of Acetyl-CoA: alpha-glucosaminide N-acetyltransferase in Skin Fibroblasts." *Proc Natl Acad Sci USA* 75(1978):5185.

74. Kresse, H.; Paschke, E.; von Figura, K.; Gilberg, W.; and Fuchs, W. "Sanfilippo Disease Type D: Deficiency of N-acetylglucosamine-6-sulfate Sulfatase Required for Heparan Sulfate Degradation." *Proc Natl Acad Sci USA* 77(1980):6822.

75. Coppa, G.V.; Giorgi, P.L.; Felici, L.; *et al.* "Clinical Heterogeneity in Sanfilippo Disease (Mucopolysaccharidosis III) Type D: Presentation of 2 New Cases." *Eur J Pediatr* 140(1983):130.

76. Dooling, E.C.; Schoene, W.C.; and Richardson, E.P., Jr. "Hallervorden-Spatz Syndrome" *Arch Neurol* 30(1974):70.

77. Roth, A.M.; Hepler, R.S.; Mukoyama, M.; Cancilla, P.A.; and Foos, R.Y. "Pigmentary Retinal Dystrophy in Hallervorden-Spatz Disease: Clinicopathological Report of a Case." *Surv Ophthalmol* 16(1971):24.

78. Swisher, C.N.; Menkes, J.H.; Cancilla, P.A.; and Dodge, P.R. "Coexistence of Hallervorden-Spatz Disease with Acanthocytosis." *Trans Am Neurol Assoc* 97(1972):212.

79. Luckenbach, M.W.; Green, W.R.; Miller, N.R.; Moser, H.W.; Clark, A.W.; and Tennekoon, G. "Ocular Clinicopathologic Correlation of Hallervorden-Spatz Syndrome with Acanthocytosis and Pigmentary Retinopathy." *Am J Ophthalmol* 95(1983):369.

80. Newell, F.W.; Johnson, R.O., II; and Huttenlocher, P.R. "Pigmentary Degeneration of the Retina in the Hallervorden-Spatz Syndrome." *Am J Ophthalmol* 88(1979):467.

81. Yanagisawa, N.; Shiraki, H.; Minakawa, M.; and Narabayashi, H. "Clinico-pathological and Histochemical Studies of Hallervorden-Spatz Disease with Torsion Dystonia, with Special Reference to Diagnostic Criteria of the Disease from the Clinico-pathologic Viewpoint." *Prog Brain Res* 21(1966):393.

82. Park, B.E.; Netsky, M.G.; and Betsill, W.L., Jr. "Pathogenesis of Pigment and Spheroid Formation in Hallervorden-Spatz Syndrome and Related Disorders." *Neurology* 25(1975):1172.

83. Vakili, S.; Drew, A.L.; Von Schuching, S.; Becker, D.; and Zeman, W. "Hallervorden-Spatz Syndrome." *Arch Neurol* 34(1977):729.

84. Hutchinson, J. "Slowly Progressive Paraplegia and Disease of the Choroid with Defective Intellect and Arrested Sexual Development." *Arch Surg (London)* 1(1920):118.

85. Hallgren, B. "Retinitis Pigmentosa Combined with Congenital Deafness; with Vestibulo-cerebellar Ataxia and Mental Abnormality in Proportion of Cases: A Clinical and Genetic-statistical Study." *Acta Psychiatr Scand* [*Suppl*] 138(1959):1.

86. Merin, S.; Abraham, F.S.; and Auerbach, E. "Usher's and Hallgren's Syndromes." *Acta Genet Med Gemellol (Roma)* 23(1974):49.

87. Nuutila, A. "Dystrophia Retinae Pigmentosa—Dysacusis Syndrome (DRD): A Study of the Usher or Hallgren Syndrome." *J Genet Hum* 18(1970):57.

88. Davenport, S.L.H. and Omenn, G.A. "The Heterogeneity of Usher Syndrome," abstract. *Fifth International Conference on Birth Defects*. Amsterdam: Excerpta Medica, 1977, pp 87–88.

89. Batemen, J.B.; Riedner, E.O.; Levin, L.S.; and Maumenee, I.H. "Heterogeneity of Retinal Degeneration and Hearing Impairment Syndromes." *Am J Ophthalmol* 90(1980):755.

90. Fishman, G.A.; Kumar, A.; Joseph, M.E.; Torok, N.; and Anderson, R.J. "Usher's Syndrome: Ophthalmic and Neuro-otologic Findings Suggesting Genetic Heterogeneity." *Arch Ophthalmol* 101(1983):1367.

91. Diallinas, N.P. "Les alterations oculaires chez les sourd-muets." *J Genet Hum* 8(1959):225.

92. Amalric, P. "A New Type of Tapeto-retinal Degeneration in the Course of Deaf-mutism." *Bull Soc Ophthalmol Fr* 73(1960):196.

93. Francois, J.; Haustrate-Gosset, F.; and Donck, D. "Macular Dystrophy in Deafmutism." *Acta Genet Med Gemellol (Roma)* 16(1967):63.

94. Arden, G. B. and Fox, B. "Increased Incidence of Abnormal Nasal Cilia in Patients with Retinitis Pigmentosa." *Nature* 279(1979):534.

95. Newsome, D.A. and Nussenblatt, R.B. "Retinal S Antigen Reactivity in Patients with Retinitis Pigmentosa and Usher's Syndrome." *Retina* 4(1984):195.

96. Cockayne, E.A. "Dwarfism with Retinal Atrophy and Deafness." *Arch Dis Child* 11(1936):1.

97. Guzzetta, F. "Cockayne-Neill-Dingwall Syndrome." In *Handbook of Clinical Neurology*, Vol. 13. P.J. Vinken and G.W. Bruyn (eds). Amsterdam: Elsevier, 1972, pp. 431–40.

98. Proops, R.; Taylor, A.M.; and Insley, J. "A Clinical Study of a Family with Cockayne's Syndrome." *J Med Genet* 18(1981):288.

99. Pearce, W.G. "Ocular and Genetic Features of Cockayne's Syndrome." *Can J Ophthalmol* 7(1972):435.

100. Levin, P.S.; Green. W.R.; Victor, D.L.; and MacLean, A.L. "Histopathology of the Eye in Cockayne's Syndrome." *Arch Ophthalmol* 101(1983):1093.

101. Hijikata, F.; Hirooka, H.; Ohno, T., *et al.* "Cockayne's Syndrome: A Histopathologic Study of the Ocular Tissues." *Rinsho Ganka* 23(1969):187.

102. Sebag, J.; Albert, D.M.; and Craft, J.L. "Alström Syndrome: Ophthalmic Histopathology and Retinal Ultrastructure." *Br J Ophthalmol* 68(1984):494.

103. Barnard, R.I. and Scholz, R.D. "Ophthalmoplegia and Retinal Degeneration." *Am J Ophthalmol* 27(1944):621.

104. Kearns, T.P. and Sayre, G.P. "Retinitis Pigmentosa, External Ophthalmoplegia, and Complete Heart Block. Unusual Syndrome with Histologic Study in One of Two Cases." *Arch Ophthalmol* 60(1958):280.

105. Kearns, T.P. "External Ophthalmoplegia, Pigmentary Degeneration of the Retina, and Cardiomyopathy: A Newly Reorganized Syndrome." *Trans Am Ophthalmol Soc* 63(1965):559.

106. Eagle, R.C.; Jr., Hedges, T.R.; and Yanoff, M. "The Atypical Pigmentary Retinopathy of Kearns-Sayre Syndrome. A Light and Electron Microscopic Study." *Ophthalmology* 89(1982):1433.

107. Bard, L.A.; Bard, P.A.; Owens, G.W.; and Hall, B.D. "Retinal Involvement in Thoracic Pelvic Phalangeal Dystrophy." *Arch Ophthalmol* 96(1978):278.

108. Allen, A.W.; Moon, J.B.; Hovland, K.R.; and Minckler, D.S. "Ocular Findings in Thoracic-pelvic-phalangeal Dystrophy." *Arch Ophthalmol* 97(1979):489.

109. Wilson, D.J. and Weleber, R.G. "Retinal Dystrophy in Jeune's Syndrome." *Arch Ophthalmol* (submitted for publication). 1986.

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Book Review

Neurological Disorders of Pregnancy, edited by Phillip J. Goldstein MD, Obstetrician and Gynecologist-in-Chief, Sinai Hospital of Baltimore, Inc. Mount Kisco, NY: Futura Publishing Company, Inc. 1986.

This compact volume (283 pages) covers a wide scope of neurological disorders in the pregnant patient. Its range extends from the commonly occurring, usually self-limiting carpal tunnel syndrome to the rare, very serious disorders such as myasthenia gravis, multiple sclerosis, and amyotropic lateral sclerosis. Nineteen contributors with specialties in obstetrics, anesthesiology, neurology, and psychiatry present major topics in thirteen chapters, with several subtopics in each chapter. Neurological disorders are presented from the standpoint of their effect on pregnancy, the effect of pregnancy on the particular disorder, pathophysiology, clinical recognition, diagnostic procedures, drug therapies, and management. The text is well referenced and many tables such as that presenting antimicrobics in pregnancy for CNS infections provide useful material in a concise, comprehensible manner.

Although this book will not replace the need for the obstetrician generalist to obtain specialty consultation when faced with a significant neurological disorder, *Neurological Disorders of Pregnancy* can be valuable to the obstetrician as an overall review of the subject. It may enhance awareness of the myriad neurological problems that may complicate pregnancy and assist in communicating with other specialists in caring for the pregnant patient.

ARNED L. HINSHAW MD, JD, FACOG

Library Page

Selected Medical Literature Searches

The following are among the computerized medical literature searches provided to Med-Chi members during September 1986.

	Number of Citations
1. Aging and exercise	36
2. Antibiotic and oral contraceptive drug interactions	22
3. Bronchiolitis obliterans	29
4. Causes and treatment of lichen planus	25
5. Clonidine in substance withdrawal syndrome	25
6. House calls	28
7. Physician credentialing	22
8. Psychiatric emergencies in children and adolescents	22
9. Sweat gland adenoma	20
10. Ureteroscopy	22

If you would like a copy of one of these searches or a search run on any biomedical topic, call or write the library.

SUSAN E. HARMAN
Reference and Circulation Librarian

Medical and Chirurgical Faculty of the State of Maryland Library, 1211 Cathedral Street, Baltimore, MD 21201. Joseph E. Jensen, Librarian

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January 1988
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Med-Chi members reading papers before organizations, are invited to submit their papers to the MMJ for consideration for publications.

The *Maryland Medical Journal* is the monthly publication of the Medical and Chirurgical Faculty of the State of Maryland. Its goals are educational and informative: the publishing of scientific articles and other technical information as well as editorials, special articles (evaluations, position papers, reviews of nonscientific subjects), membership news, notices of medical events, legislative and governmental news, meetings, continuing education courses, and programs and policies of the Faculty.

Manuscripts may be sent to Editor *MMJ*, 1211 Cathedral St., Baltimore, MD 21201. Articles are accepted for publication on the condition that they are contributed solely to this journal. Transmittal letters should designate one author as correspondent and include his/her address and telephone number. Manuscripts are reviewed by the editor, editorial board members, and guest reviewers. The final decision is reserved for the Editor.

Specifications

Manuscripts must be original typed copy, double-spaced throughout (including text, case reports, legends, tables, and references) with margins of at least one inch. Number pages consecutively. Please submit two additional copies.

Include in the manuscript the concise title, full name of the author (or authors) with highest degree, academic and professional titles, affiliations, and any institutional or other credits.

An introductory synopsis/abstract of approximately 100–150 words is required.

Tables are to be typed on separate sheets of paper, numbered, and have a brief descriptive title. The Editor reserves the right to edit tables. Be sure that statistics are consistent in both tables and text.

References are limited to those citations noted in the text. References are to be typed double-spaced and numbered consecutively as they appear in text. They will be examined critically at the time of review and must be kept to a minimum. The number of references is generally limited to 20 in major contributions and fewer in shorter articles. Exceptions may be made if appropriate in the opinion of the reviewing editor. Personal communications and unpublished data should not be included. The following are necessary: names of all authors, complete title of article cited (lower case), name of journal abbreviated according to *Index Medicus*, volume number, first and last page numbers, and year of publication. For more extenisve information about preparing medical articles for publication, the editors suggest the International Committee of Medical Journal Editors: Uniform requirements for manuscripts submitted to biomedical journals. The complete document is available in the June 1982 issue of the *Annals of Internal Medicine*.

Illustrations are material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper. *Omit illustrations that do not increase understanding of text, and limit them to a reasonable number.* Four or fewer illustrations should be adequate for a manuscript of 4 to 5 typed pages. Legends are to be typed on a separate sheet of paper. Type on a gummed label and affix to the back of each illustration: figure number, title of manuscript, name of senior author, and arrow indicating top. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs and drawings. *Cost of printing color* photographs must be borne by the author.

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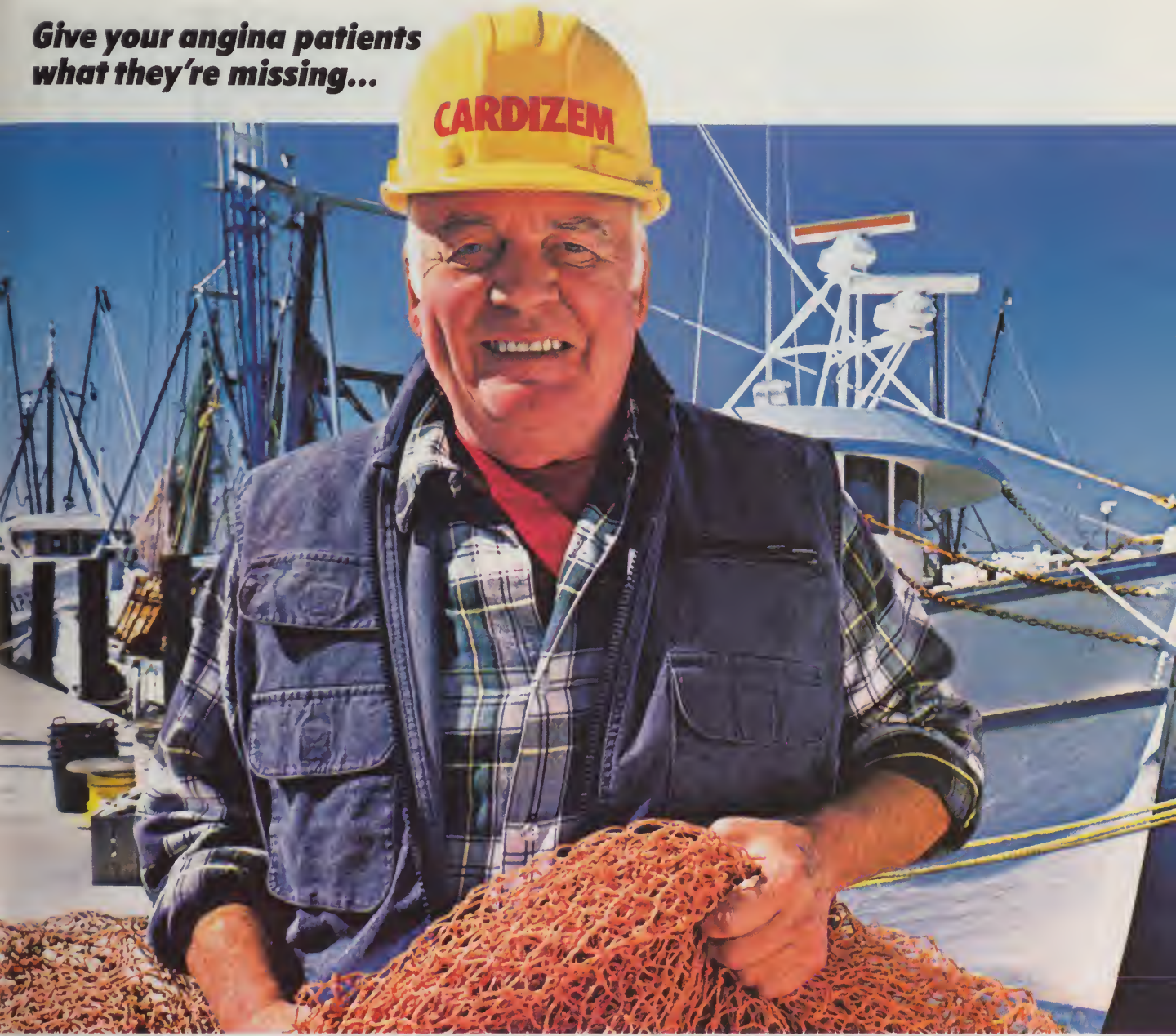
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WARNINGS

1. ***Cardiac Conduction.*** *CARDIZEM prolongs AV nodal refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.*
2. ***Congestive Heart Failure.*** *Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt).*
   Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. ***Hypotension.*** *Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.*
4. ***Acute Hepatic Injury.*** *In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)*

PRECAUTIONS

General. *CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.*

Drug Interaction. *Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)*

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.*

Pregnancy. *Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.*

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. *Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.*

Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastraintestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 7/86*

See complete Professional Use Information before prescribing.

References: ***1.*** *Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347.* ***2.*** *Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159.* ***3.*** *Johnstan DL, Lesaway R, Humen DP, et al: Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol 1985;55:680-687.* ***4.*** *Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39.* ***5.*** *Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.*

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Medical and Chirurgical Faculty of the State of Maryland

Semiannual Session House of Delegates 319th Meeting

Saturday, September 27, 1986
Minutes: House of Delegates
Faculty Building, 1211 Cathedral Street, Baltimore, MD 21201

The 319th meeting of the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland was called to order at 2:05 p.m. on Saturday, September 27, 1986 at the Faculty Building, Baltimore, Maryland, The President, Donald T. Lewers MD, and Secretary, Raymond M. Atkins MD, being present.

The following delegates (or alternates indicated by an asterisk) were registered as being in attendance, all by county indicated:

Allegany County
Victor F. Felipa
Wally S. Hijab

Anne Arundel County
Kenneth M. Hoffman
Hilary T. O'Herlihy
Jorge B. Ramirez
*Jacob E. Teitelbaum

Baltimore City
Aristides C. Alevizatos
Donald M. Barrick
James E. Bell
*Joseph I. Berman
Brian D. Briscoe
Stephen M. Busky
*Lionel A. Desbordes
Marion Friedman
*Sheldon Goldgeier
Michael G. Hayes
John H. Hirschfeld
*Gerald A. Hofkin
Joseph H. Hooper
Thomas E. Hunt
*Murray A. Kalish
Jeanne S. Kraus
John B. MacGibbon
Donald W. Mintzer
Albert Nahum
Samuel I. O'Mansky
William F. Renner
Benjamin Rothfeld
*William B. Russell
*Richard T. Scholz
*Bernard R. Shochet
Edward L. Suarez-Murias
George Taler
Thomas E. Van Metre, Jr.
*Jack M. Zimmerman

Baltimore County
Thomas E. Allen
Esther Edery
*Maurice B. Furlong
A. H. Ghiladi
*Alfonso Janoski
*Deusdedit Jolbitado
Paul G. Koukoulas
Herbert J. Levickas
William Reichel
Allan G. Scott
Margaret L. Sherrard

Cecil County
Andrew P. Fridberg

Charles County
Guillermo E. Sanchez

Harford County
Rose M. Bonsack
Ben E. Oteyza

Howard County
Frederick Bergmann
Elwood H. La Brosse

Kent County
Harry P. Ross

Montgomery County
Carol L. Bender
Jonathan S. Lyons
Francis C. Mayle, Jr.
Edward S. Mehlman
John P. Nasou
Margaret T. Snow

Prince George's County
John E. Jeffrey
Zorayda M. Lee-Llacer
*Manuel P. Porres
*Frederick Wilhelm

Talbot County
Alfred A. Leszczynski

Washington County
Edward W. Ditto

Wicomico County
Alex Azar
*Hilda Houlihan

Council
Albert M. Antlitz
Raymond M. Atkins
Ira N. Brecher
Aurelio De La Paz
Benjamin Del Carmen
Donald H. Dembo
Michael R. Dobridge
Vincent D. Fitzpatrick
John H. Hebb
Leon E. Kassel
Robert G. Kindred
Reynaldo L. Lee-Llacer
Donald T. Lewers
George S. Malouf
Leslie R. Miles, Jr.
John H. Mulholland
Hiroshi Nakazawa
Charles F. O'Donnell
Donald J. Roop
Gary L. Rosenberg
Roland T. Smoot
Joseph Snyder
Albert J. Strauss
John B. Umhau
Baltasar B. Velez
Israel H. Weiner
Donald W. Wiczer
Kennard L. Yaffe
Jose M. Yosuico

Board of Medical Examiners
Arthur T. Keefe, Jr.

Past Presidents
Karl F. Mech

Also present were members of the Faculty staff.

Invocation

Leslie R. Miles MD, Chairman of the Committee on Medicine and Religion, gave the invocation.

Introduction of New Executive Director

Donald T. Lewers MD, Presiding Officer, introduced Angelo Troisi, the new Executive Director of the Medical and Chirurgical Faculty, to members of the House. He briefly reviewed the selection process. Mr. Troisi delivered brief remarks.

Guest Speakers

Carl J. Sardegna, President, Blue Cross and Blue Shield of Maryland, addressed the members of the House in the areas of reimbursement, quality assurance, and claims management.

John G. Lodmell MD, member of the Board of Directors of Medical Mutual Liability Insurance Society, addressed the House on the issues of financial stability of the company, premium rate structure, proposed construction, and claims experience in the recent past.

Award Presentation

Albert M. Antlitz MD, Chairman of the Board, Center for Health Education, presented an award on behalf of the Center to John Southard MD, Assistant Director of the Preventive Disease Section of the Department of Health and Mental Hygiene, for a significant contribution in the field of physician education. Dr. Southard made brief remarks upon acceptance of the award.

Presentation to Building Committee

Raymundo Magno MD, President of the Association of Philippine Physicians of Maryland, presented a check for $7,000 to the Med-Chi Building Fund on behalf of this organization. Dr. Magno, in his remarks, indicated the figure represents a partial payment on a commitment by the Philippine physicians to raise a total of $10,000 to be contributed to the fund. The president thanked Dr. Magno and recognized the work of the Building Committee and its chairman, George S. Malouf MD.

Minutes Approved

The minutes of the meetings of the House of Delegates held on April 16 and April 18, 1986, having been distributed to all members and corrected and approved by the Executive Committee, were presented to the House of Delegates. The House further amended and approved the minutes as corrected.

Council Chairman Report

On motion of Michael R. Dobridge MD, Council Chairman, the following members, having received the recommendations of their Component Societies and the Council, were elected to Emeritus Membership in the Faculty.

Emeritus Members

Baltimore City
Beatrice L. Selvin MD, Baltimore
Abraham M. Schneidmuhl MD, Baltimore

Baltimore County
Matlu U. Atagun MD, Owings Mills
Leonard H. Berger MD, Baltimore
D'Arnaud Gerkens MD, Lutherville
James J. Gibbs MD, Baltimore
Salvador Rossello MD, Baltimore
Harry D. Shernan MD, Baltimore
John F. Ullsperger MD, Timonium
Harold R. Weiss MD, Baltimore

Calvert County
Osman Z. Ersoy MD, Prince Frederick

Carroll County
Rafi Q. Iqbal MD, Sykesville

Howard County
William J. Bryson MD, Cooksville

Montgomery County
Roland J. Cavanaugh MD, Silver Spring
Frederick Y. Donn MD, Washington, DC
Herbert J. Jacobs MD, Silver Spring

Prince George's County
Orhan H. Aydinel MD, Oxon Hill
Santiago L. Garza MD, Temple Hills
Marcia B. Kraft MD, Silver Spring

Talbot County
Justin T. Callahan MD, Easton
Octavus P. Large MD, Oxford

Wicomico County
Gladys M. Allen MD, Westover
Dermot J. O'Neill MD, Salisbury

Council Resolution Adopted

Dr. Dobridge, on behalf of the Council, moved adoption of the following resolution:

Resolved, That the Medical and Chirurgical Faculty of the State of Maryland become a member of and participate in a membership organization to inquire into and respond to the proposal by the Department of Defense to restructure the CHAMPUS Program, and other issues of common interest, and

Resolved, That the Medical and Chirurgical Faculty begin an investigation into the feasibility of creating a statewide organization or network of physician IPAs capable of entering into contracts for the provision of health care on behalf of its physician members, and

Resolved, That the Council shall have the authority to authorize expenditure of funds and the creation of such an organization should the investigation indicate that such an organization should be formed.

There being a two-thirds vote after debate, the resolution was adopted.

Treasurer's Report

Jose M. Yosuico MD, Faculty Treasurer, read the certificate of Bennett, Labrador, O'Dea, and Posey, PA, CPAs, as to the accuracy of the Faculty's books and records for the 1985 calendar year and an opportunity was given for questions. The House, by unanimous consent, approved the auditor's certification.

1985–1986 Committee Reports

The following 1985–1986 Committee reports having been distributed in writing to all members for information, an opportunity was afforded to raise questions or make comments.

Report of the Delegates to the American Medical Association—Albert M. Antlitz MD, Charles F. O'Donnell MD, Manning W. Alden MD, Donald T. Lewers MD, George S. Malouf MD, Roland T. Smoot MD (Interim Meeting, December 8–11, 1985)
Ad Hoc Building Committee—George S. Malouf MD, Chairman
Ad Hoc Committee on Corporate Control of Medicine—Thomas A. Collier MD, Chairman
Ad Hoc Policy Advisory Committee on AIDS—John B. DeHoff MD, Chairman
Committee on Alcoholism and Chemical Dependency—Sheldon I. Miller MD, Bruce T. Taylor MD
Report of American Medical Association Education and Research Foundation (AMA-ERF)—Elizabeth A. Linhardt, State Chairman
Report of the Auxiliary—Kathleen S. Karpers, President
Committee on Continuing Medical Education Review—Jonathan M. Sutton MD, Chairman
Committee on Cost Effective Medical Care—Peter E. Dans MD, Chairman (no report)
Curator—E. David Weinberg MD
Committee on Drugs—Stephen A. Hirsch MD, Chairman
Committee on Emergency Medical Services—John B. DeHoff MD, Chairman
Committee on Emotional Health—Gary W. Nyman MD, Chairman
Executive Director—Elza S. Davis CAE, Acting
Finance Committee—Jose Yosuico MD, Chairman
Finney Fund Committee
Health Manpower and Planning Committee—James T. Estes MD, Chairman (no report)
Committee on Hospital Medical Staffs—Benjamin Del Carmen MD, Chairman
Legislative Committee—Israel H. Weiner MD, Chairman
Liaison Committee with Department of Health and Mental Hygiene–Uthman Ray, Jr., MD, Chairman
Liaison Committee with Third Party Carriers—Paul Bormel MD, Chairman
Library and History Committee
Long Term Care and Geriatrics Committee—Edmund G. Beacham MD, Chairman
Maryland Medical Journal—James G. Zimmerly MD, Editor; Victor R. Hrehorovich MD, Associate Editor
Maryland Medical Political Action Committee—J. Andrew Sumner MD, Chairman
Medical Annals of Maryland—Henry B. Wilson MD, Chairman (no report)
Med-Chi Insurance Fund—W. Kenneth Mansfield MD, Chairman
Medicine and Religion Committee—Leslie R. Miles, Jr., MD, Chairman
Medicolegal Committee—Arthur Kaufman MD, Chairman
Occupational Health Committee—Michael K. Spodak MD, Chairman
Peer Review Committee—Emidio A. Bianco MD, Chairman
Ad Hoc Committee on Physician Assistants—Bernard Tabatznik MD, Chairman
Physician/Patient Relations Committee—Lois E. Wehren MD, Chairman
Committee on Physician Rehabilitation—Michael G. Hayes MD, Chairman
Policy and Planning Committee (no report)
Committee on Preventive Medicine and Public Health—Annelies S. Zachary MD, Chairman
Committee on Professional Ethics—Louis C. Breschi MD, Chairman
PRO Monitoring Committee—Joseph I. Berman MD, Chairman
Public Relations Committee—James E. Bell MD, Chairman
Committee on Scientific Activity—C. Earl Hill MD, Chairman
Secretary—Bernard S. Karpers, Jr. MD
Treasurer—Jose M. Yosuico MD

Building Committee Report

George S. Malouf MD, Chairman of the Ad Hoc Building Committee, thanked the Philippine physicians for their significant contribution to the new headquarters building. He reminded the Delegates of the opportunity to participate with a significant contribution which will be recognized with an appropriate marker in the building. He also reminded them of the $100 assessment voted in April, which is mandatory for all members.

Memorial Resolutions

On motion of the Secretary, Raymond M. Atkins MD, the following resolutions were adopted unanimously by the House, each on a separate vote:

Seth H. Hurdle MD, 1897–1986

Whereas, Seth H. Hurdle MD., born in Deep Creek, Virginia, received his Doctorate of Medicine from the University of Virginia in 1926, his Master's Degree in Public Health from Johns Hopkins University in 1939, and committed himself to the practice of Public Health medicine in Salisbury, Maryland, until the time of his retirement in 1977;

Whereas, He served his country in the US Army during World War I;

Whereas, He was an active member of the medical staff of Peninsula General Hospital and served as administrator during World War II;

Whereas, He was a member of distinction in the Lions Club, Blood Bank of the Eastern Shore, Eye Bank, and other societies with which he was affiliated; and

Whereas, He gave of himself beyond limits in the service of his patients, his colleagues, and for the benefit of his community; therefore, be it

Resolved, That the House of Delegates in session on Saturday, September 27, 1986 adopts this resolution with an expression of profound sorrow on the death of Seth H. Hurdle MD, a member from Wicomico County, and

Resolved, That a copy of this resolution be sent to his wife, Eleanor B. Hurdle, and to his daughters, Mrs. Eleanor H. Mitchell, Mrs. Betty H. Osman, and Mrs. Bobbi H. Phillips, in gratitude for the eminence of his life.

Bob I. Freundlich MD, 1950–1986

Whereas, Bob I. Freundlich MD, practiced General Psychiatry in Salisbury, Maryland, from January 1978 until the time of his death on January 6, 1986;

Whereas, He was well loved by his patients, and through his knowledge and intelligence, faithfully served them and the medical community;

Whereas, His efforts to improve the services that the medical and psychiatric community had to offer, such as helping to organize and start the Life Crisis Center and the Pain Treatment Center earned him the respect of his colleagues and patients alike; and

Whereas, This caring man will be missed by his loving children, wife, and family, and the community; therefore, be it

Resolved, That the House of Delegates goes on record as expressing its sorrow at this grievous loss of Bob I. Freundlich MD, a member from Wicomico County; and

Resolved, That this resolution be spread upon the minutes of the House of Delegates meeting, Saturday, September 27, 1986, and a copy be sent to his wife, Susan Freundlich, and to his children.

Jeffrey H. Hellman, 1957–1986

Whereas, Jeffrey Harry Hellman, President of the Maryland State Medical Student Association for the year 1984–1985 died on July 28, 1986 at the age of 28;

Whereas, He served as an active member of the student association since 1982, served as an Alternate Delegate to the American Medical Association, as a representative on the Faculty's Council and in the House of Delegates, and as student representative to the Legislative Committee; and

Whereas, Jeffrey was instrumental in organizing the Second Annual Residency Seminar, attended by over 500 area medical students; therefore, be it

Resolved, That the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland expresses to the family of Jeffrey Harry Hellman its respect and deep sorrow for the loss of a valued colleague; and

Resolved, That a copy of this resolution be spread upon the minutes of the House of Delegates meeting on Saturday, September 27, 1986 and a copy be sent to the family of Jeffrey Harry Hellman.

Katharine A. Chapman MD, 1899–1986

Whereas, Katharine A. Chapman MD faithfully served her patients in Montgomery County from September 1, 1926 until her death on July 11, 1986;

Whereas, In her private practice and the manner in which she lived she was known as a gracious, conscientious, and thoughtful individual who was respected and beloved by patients and colleagues;

Whereas, Her professional activities included serving as President of the Montgomery County Medical Society, President of the Women's Medical Society, and Delegate to the Medical and Chirurgical Faculty of the State of Maryland;

Whereas, Her colleagues in the Maryland Academy of General Practice honored her in 1963 by naming her the Maryland Family Doctor of the Year;

Whereas, In her long and distinguished career she delivered more than 3,000 babies, many of whom were named Katharine Chapman in her honor; and

Whereas, All who knew her recognized her extraordinary sense of humor, her dedication to her profession, and her many contributions to the community; therefore, be it

Resolved, That the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland expresses its sorrow on the death of Katharine A. Chapman MD, and instructs that this resolution be spread upon the minutes of the House of Delegates session, Saturday, September 27, 1986, and

Resolved, That a copy of this resolution be sent to Mrs. Margaret Tremearne, the sister of Dr. Chapman.

J. Marion Bankhead MD, 1903–1986

Whereas, J. Marion Bankhead MD, after a long and distinguished career in Montgomery County, died on July 18, 1986;

Whereas, The loss of his skills in and concern about the health care of his community are sorely missed by his patients and his colleagues;

Whereas, His activities on behalf of his profession were outstanding and well-known, exemplified by his election as President of the Montgomery County Medical Society in 1936; and

Whereas, His competence, dignity, and understanding honored himself and his profession; therefore, be it

Resolved, That the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland expresses its sorrow on the death of J. Marion Bankhead MD, and instructs that this resolution be spread upon the minutes of the House of Delegates session, Saturday, September 27, 1986; and

Resolved, That a copy of this resolution be sent to his wife, Mrs. Eleanor Bankhead, and his son, John M. Bankhead, Jr.

Maryland Foundation for Health Care Elections

The Secretary read the nominations submitted for election to the Board of Directors of the Maryland Foundation for Health Care. Nominations were made from the floor, in certain cases where nominees had not been submitted.

There being no contest for any position, the following were elected by voice vote:

Baltimore City
Paul Bormel MD, U, (1989)
Jack M. Zimmerman MD, GS, (1989)

Baltimore County
Charles F. Hoesch MD, IM, (1989)

Prince George's County
Robert Ruderman MD, IM, (1989)

Eastern District
Louis H. Himes, II, MD, EM, Wicomico County (1989)

Western District
Wally S. Hijab MD, CD, Allegany County (1989)

Bylaws Committee Report

Reynaldo L. Lee-Llacer MD, on behalf of the Bylaws Committee moved adoption of the following bylaw amendment which was adopted by unanimous consent:

Amendment Adopted

Amend Article XI (Committees), Section 1 (Alcohol and Chemical Dependence Committee) by adding the following sentence:

The President shall designate the chairman.

Dr. Lee-Llacer, on behalf of the Bylaws Committee, moved adoption of the following bylaw amendment, which, after debate, received the required two-thirds vote for adoption as follows:

Computers in Medicine Committee

Amend Article XI (Committees) by inserting after Section 2, the following new Section 3 (automatically redesignating all subsequent sections):

Section 3. A COMMITTEE ON COMPUTERS IN MEDICINE of at least five members shall be appointed annually. It shall maintain and monitor the Faculty's computer bulletin board (Maryland MedSig) and shall advise the Faculty and its member physicians of trends and developments in computer technology as these affect the practice of medicine, the administration of physicians' offices, and the operation of the Faculty. The committee shall arrange for and assist with educational programs related to physician use of computers and computerized information gathering. The committee also shall be a liaison in arranging for telecommunications between the Faculty and other health-related organizations. Its chairman shall be appointed by the President and said chairman shall appoint the other members of the committee with the approval of the President.

AMA Delegation—Amendment Rejected

Dr. Lee-Llacer, on behalf of the Bylaws Committee, moved adoption of the following bylaw amendment, which, after debate, was recommitted to the Bylaws Committee for further clarification:

Amend Article XI (Committees), Section 5, by substituting for it the new section:

Section 5. At least two of THE DELEGATES AND THEIR ALTERNATES TO THE AMERICAN MEDICAL ASSOCIATION shall be nominated and elected annually in the same manner and at the same time as that provided for the elective officers. Except for the Alternates who are members of component societies composed exclusively of residents or students, the terms of all Delegates and Alternates shall begin on January 1 of the year following their election, and they shall serve for a term of three years or until their successors are elected. The terms of one student and one resident Alternate shall begin on May 1 of the year in which they are elected, and they shall serve for a term of one year or until their successors are elected. They shall be eligible to serve only while they remain actively enrolled in their respective component society. In the event of a vacancy among the Delegates, the President shall designate the Alternate who shall act in the Delegate's place, taking into account, but not being bound by, such considerations as seniority. If the Delegate is able to resume his seat before the next session of the House of Delegates, the Alternate shall resume his former status; but should this not be possible, the House shall consider both the Delegate and the Alternate positions vacant and proceed to fill the same.

Dr. Lee-Llacer, on behalf of the Bylaws Committee, moved adoption on the following bylaw amendment, which was adopted by the required two-thirds vote:

Library and History Committee

Amend Article XI (Committees), Section 18, by substituting for it the following new section:

Section 18. A LIBRARY AND HISTORY COMMITTEE shall be appointed by the President to consist of not less than five members to consider and advise the Council and the Executive Committee on the administration and operation of the Faculty's Department of Library and Information Services. It shall advise the Executive Director and Officers in the selection of the department's director. It shall assist the director in preparing an annual budget for the operation of the department. It shall advise the director in the expenditure of the library's endowment funds. It shall advise the Council on rules for the use of the library by the different categories of Faculty members and by others. It shall be responsible for and shall advise the Faculty on the maintenance and preservation of the Douglas G. Carroll, Jr., MD Collection of Rare and Historical Medical Books and Manuscripts, the Faculty's collections of art works and antique instruments, and the Faculty's archives. Its chairman shall be appointed by the President.

Nominating Committee Report

George Malouf MD, Chairman of the Nominating Committee, presented the name of J. Richard Lilly MD to fill a vacancy on the Committee on Scientific Activity created by resignation.

There being no nominations from the floor, Dr. Lilly was declared elected.

Review of Policy Decisions

The Secretary reported Resolution 3A/76, 1S/76 and 5S/76 with a staff recommendation that they be reaffirmed. Resolutions 3A/76, 1S/76 and 5S/76 were reaffirmed as follows:

Resolution 3A/76 Reaffirmed

Resolved, That the Medical and Chirurgical Faculty fully supports the Maryland Academy of Ophthalmology and the Maryland Ophthalmological Society in their efforts to keep quality care in Blue Shield programs by insisting on coverage for medical eye care by physicians and asserts the position that equating such care with that rendered by nonphysicians is an affront to the medical profession and consumers alike; and be it

Resolved, That in all programs of eye care offered to their subscribers, Blue Shield of Maryland, Inc., and Medical Service of DC, be urged to delineate to the extent legally possible the differences in services provided by physicians and non-physicians.

Resolution 1S/76 Reaffirmed

Resolved, That the Medical and Chirurgical Faculty of the State of Maryland hereby goes on record as continuing to preserve the highest quality of medical care by its continuing to oppose any legislation or administrative attempt to give Optometrists a license to prescribe or apply eye medications or to diagnose disease or injury or to diagnose the absence of disease or injury; and be it further

Resolved, That this intention be relayed by mail to every Delegate and Senator in the Maryland General Assembly and to the Governor of the State of Maryland and by the Legislative Committee at appropriate hearings, in order to reinforce the resolution of physicians of the State of Maryland as being united in this endeavor.

Resolution 5S/76

Resolved, That the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland strongly supports the position of the Board of Medical Examiners with respect to the utilization of Nurse/Practitioners, in that regulations involving the use of such Nurse/Practitioners be jointly promulgated by the Board of Medical Examiners and the Board of Nurse Examiners; and be it

Resolved, That, in any event, such Nurse/Practitioners be permitted only to work under the supervision of licensed and qualified physicians when performing those functions defined as the Practice of Medicine; and be it

Resolved, That such Nurse/Practitioners not be permitted to identify themselves or practice as Independent Practitioners whenever such activity involves the Practice of Medicine as defined under State Law.

Elza S. Davis Resolution

Michael R. Dobridge MD, Council Chairman, presented the following resolution on behalf of the Council, which was adopted unanimously by the House:

Whereas, Following the untimely death of John Sargeant, the Medical and Chirurgical Faculty was left with a void in its leadership which was ably filled by Ms. Elza Davis as Acting Executive Director;

Whereas, Ms. Davis' diligence and expertise facilitated the Medical and Chirurgical Faculty's functioning during this critical time; and

Whereas, Ms. Davis' untiring efforts in Annapolis and throughout the state on behalf of physicians contributed to the enactment of the first meaningful tort reform legislation adopted by the State of Maryland; therefore, be it

Resolved, That this House of Delegates expresses its heartfelt appreciation to Ms. Elza Davis for a job well done and expresses its hope that her wise counsel will continue to be available to the physicians of Maryland for many years to come.

President's Remarks

Dr. Lewers then addressed the House briefly and entertained questions and remarks from the floor.

There being no further business to come before the House, the meeting was adjourned sine die at 4:25 p.m.

RAYMOND M. ATKINS, MD
Secretary

Statement of Ownership, Management, and Circulation

Maryland Medical Journal, published by the Medical and Chirurgical Faculty of the State of Maryland, 1211 Cathedral St., Baltimore, MD 21201. James G. Zimmerly MD, Editor; Victor R. Hrehorovich MD, Associate Editor; Ann Wintriss, Managing Editor. Editorial Offices: 1211 Cathedral St., Baltimore, MD 21201. Owner: Medical and Chirurgical Faculty of the State of Maryland. No known bondholders, mortgagees, or other security holders.

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Sum total 7,200; average: 7,330.

Delegates to the AMA House of Delegates
Annual Meeting, June 15–19, 1986

Mr. President and Members of the House of Delegates:

Your delegation attended the 1986 annual session of the AMA House of Delegates in Chicago and reports the following summary of actions taken on the major issues considered at this meeting.

AMA Finances

- The 1987 dues will remain the same.
- Even though the projection for FY 1986 year-end is only $1.2 million revenue in excess of expense, the Board of Trustees decided not to ask for a dues increase in 1987.
- The House was informed that any number of factors such as lower advertising revenues, higher production costs, or reduced investment rates of return could further erode this narrow margin.
- The impact of net losses associated with AMACO (AMA's malpractice reinsurance company) were addressed. The House was assured that there will be no further capital infusion of AMA assets into AMACO present levels. Efforts are under way to enhance AMACO's capitalization and to improve its market position, thereby ensuring its continuing viability.

Young Physicians' Section

- In a major effort to strengthen both the active involvement and membership of young physicians in organized medicine, the House established a new Young Physicians Section with a voting delegate.
- The AMA also will assist state medical associations in establishing similar sections.
- The AMA will encourage efforts to appoint qualified young physicians to leadership positions throughout organized medicine.
- A steering committee has been appointed, with the goal of having the new section operational at the 1986 Interim Meeting.
- The Young Physicians Section is the fifth special section created within the last ten years.

Physician Manpower

The House amended and adopted the final report of the AMA Task Force on Physician Manpower, which is a comprehensive study of the manpower issue. The report contains several recommendations for determining the need for physicians' services and for projecting the future supply of physicians. The recommendations are:

Recommendation 1: That the American Medical Association carry out extensive, ongoing analyses on physician manpower issues. The appropriate AMA unit(s) would:

- model long-term trends and projections in the supply of physicians and their geographic and specialty distributions;
- analyze the probable impact of alternate manpower policy scenarios on the physician population;
- analyze how the need for physicians is affected by changes in the health care system, including technological innovations, demographic changes of the general population, and the changing modalities of health care delivery; and
- become the resource center and clearinghouse for physician manpower data and analyses.

Recommendation 2a: That the AMA encourage the US medical education system to review data and analyses regarding physician supply and its impact on the quality and cost of care so that educators can appropriately establish the size of total enrollment. This could be accomplished by the following actions:

- Participation of all sectors of the US medical education system in the planning and decision making that will determine the size of the physician manpower pool in the future.
- Careful review by US medical schools of the size of their current first-year enrollment. Decreases in student enrollments should not lead to decreased funding, if the quality of medical education programs is to be maintained.

Recommendation 2b: That the Council on Medical Education continue to monitor closely the relationship between the size of medical school enrollments and the quality of educational programs.

Recommendation 2c: That the AMA support repeal of federal legislation and regulations that mandate maintaining specified enrollment in US medical schools, and that the AMA encourage the repeal of any state laws mandating maintenance of specified enrollments at state-supported medical schools.

Recommendation 2d: That the AMA continue to actively support policies that maintain appropriate quality standards and criteria for the practice of medicine. Accreditation criteria always must be based solely on reasonable quality standards and may not be used for any other purposes. Where concerns about quality are documented, accrediting bodies have an obligation to take corrective action, regardless of the secondary effects. Thus, the AMA should:

- consider the accreditation of foreign medical schools by the LCME or some other body in the private sector;
- encourage residency program directors to thoroughly screen the credentials of all applicants for residency positions to ensure that they have had sufficient preparatory education; and
- advocate the continued development of more effective state licensing and disciplinary criteria.

Recommendation 3: That the AMA more actively disseminate to the general public information about the changing characteristics of medical practice and the medical community. This information would include:

- current trends in the size, distribution, and mix of the physician population;
- factors influencing the organization and management of physician practices;
- decisions facing new physicians when establishing their practices; and
- negative consequences of the impending physician surplus on quality and cost of care.

Recommendation 4: That the AMA coordinate efforts with the state medical societies to provide state legislators and administrators with information that will allow them to determine which health manpower policies are best suited for their states. This information will be developed as a result of Recommendation 1.

Recommendation 5: That the AMA work toward a more favorable geographic distribution of physicians by making efforts to provide physicians with more extensive information with which to make their location decisions. Included in these efforts would be:

- working with state medical societies to pinpoint areas which have too few or too many physicians to meet the demands of the population; and
- strengthening current efforts to provide physicians with market area profiles of potential sites and sponsoring the Physician Placement Service.
- The House of Delegates adopted the following resolution:

Resolved, That the American Medical Association continue to work to protect the rights and privileges of all physicians duly licensed in the United States regardless of ethnic or educational background; and be it further

Resolved, That the AMA oppose any legislative efforts to discriminate against duly licensed physicians on the basis of ethnic or educational background.

Recommendation 6: That medical students be provided with appropriate information so they can best make their choice of specialty training. The AMA would facilitate this process by:

- analyzing data on trends in the specialty distribution of physicians;
- working with the national specialty societies in developing and disseminating projections of supply and need for the various physician specialties; and
- distributing information on specialty trends to medical students and residents.

Recommendation 7: That the AMA institute programs that would assist physicians seeking a transition from a full-time practice.

The House of Delegates added a final recommendation: That the AMA continue to support the enrollment and retention in US medical schools of underrepresented groups.

Financing Health Care for the Elderly

The House adopted a comprehensive proposal to replace the existing federal Medicare program with a *new program* to finance health care for the elderly.

This innovative program would:

- be pre-funded and designed to be fiscally sound,
- provide comprehensive protection, including catastrophic coverage,
- have differing levels of beneficiary cost-sharing based on ability to pay,
- ensure free choice among competing health plans providing specified adequate benefits,
- assure access to high quality health care by the elderly.

The AMA plans wide dissemination of these new proposals to the executive and legislative branches of the federal government, other concerned groups, and the public.

Competition

The House adopted two reports that review AMA initiatives to assist physicians in remaining competitive in their practices.

One report recommended against the development of a national delivery system due to:

- conflict with AMA's mission,
- financial risks to the Association, and
- potential adverse internal political ramifications.

The second report describes new and expanded AMA activities designed to enhance the competitive posture of its members, including:

- analyzing existing and emerging delivery and financing systems and serving as an information clearinghouse for physicians and medical societies,
- providing contract assistance services,
- providing statistical reports to physicians for any geographic area through the AMA Market Area Profile Service (MAPS),
- assisting physicians to secure suitable practice opportunities through the AMA Physicians Placement Service,
- bringing physicians timely and useful information through teleconferencing with such topics as practice development, socioeconomics, continuing medical education, risk management, and policy and political efforts of the AMA.

Public Awareness Campaign

The House considered a report of the Advisory Committee on Public Awareness which was established at the 1985 Interim Meeting. The Advisory Committee reviewed current and planned AMA communication activities and made several recommendations which were accepted by the House.

Other potential projects will be studied by the Board and reported to the House at the 1986 Interim Meeting.

The Board reported that it is committed to a strong, integrated program of communications activities that serves all of the missions of the AMA. The Advisory Committee found current projects to be "high-quality, well-planned professional work."

Advertising of Alcoholic Beverages

The House adopted a report dealing with alcohol advertising, counteradvertising, and depiction in the public media.

The report called for:

- additional research,
- discontinuation of alcohol advertising directed toward youth,
- elimination of television program content depicting irresponsible use of alcohol without showing its adverse consequences,
- addition of health education labels on all alcoholic beverage containers, and
- encouragement of the alcohol beverage industry to accurately label all product containers as to ingredients, preservatives, and ethanol content.

Professional Liability

There was extended discussion on a number of items

addressing the professional liability and insurance crisis.

A report of the Special Task Force on Professional Liability detailed the continuing activities of the Association, including:

- an update on federal legislation,
- consideration of alternatives to traditional tort reform,
- AMA activities with numerous coalitions,
- AMA response to allegations by the Association of Trial Lawyers of America,
- increased activities in risk management, and
- peer review and discipline initiatives.

The House adopted a resolution calling on the AMA to study the desirability of establishing "liability courts" that would process liability cases.

The House adopted a resolution calling on the AMA to provide state medical associations with information concerning legal challenges to tort reforms in various states.

Conclusion

AMA House meetings provide a unique educational opportunity, and we would encourage you to attend and participate. Any member of the Association may present testimony at the Reference Committee hearings and, of course, corridor discussions on the issues provide ample opportunities to get your views across.

If you can't come to the meeting you can still be represented through your delegate. Let your delegation know your opinions. You can also prepare a resolution and request that it be submitted to the House.

Many AMA policies began with an individual physician who had a good idea and coaxed it through the democratic process.

Delegates:
ALBERT M. ANTLITZ MD, Chairman
ROLAND T. SMOOT MD
DONALD T. LEWERS MD
GEORGE S. MALOUF MD
CHARLES F. O'DONNELL MD
MICHAEL R. DOBRIDGE MD

Alternates:
JOHN H. HEBB MD
HENRY N. WAGNER, JR., MD
JOSEPH SNYDER MD
HILDA I. HOULIHAN MD
CEE A. DAVIS MD (Resident)
NICHOLAS P. GEORGES (Student)

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Board of Medical Examiners
Annual Report FY 1985–1986

The Board of Medical Examiners is enduring significant changes brought about by new legislation. The first is legislation requiring a Test of Spoken English for any foreign medical school graduate who applies for licensure after July 1, 1986. The second major change comes about through the Physician Assistant Act, which went into effect July 1, 1986. This Act provides for certification for physicians assistants. The Physician Assistant Advisory Committee is working on regulations to implement this Act. The third major piece of legislation is the Certification of Nuclear Medical Technologists and Radiation Technologists, bringing under the supervision of the Board approximately 3,000 radiation technicians. The fourth major change, the Drugs-Authorized Prescribers bill, provides for physician dispensing. The Board must develop regulations that will state how these drugs will be dispensed as per pharmacy statutes and regulations and the conditions for approval of this dispensing privilege. The Board is subjected to major additional workload with no prospect of fiscal relief.

The legislation the Board requested in terms of licensure for foreign medical school graduates was not forthcoming. The bill presented was poorly understood, and it failed. Legislation will be resubmitted this year, and the Board has greater expectation of success.

The needs of the Board remain the same: a computer, additional staff, and space for both are necessary. The fiscal problems of trying to implement the Medical Practice Act are not being resolved through the present allocation process. Although sufficient revenues are generated through physicians fees, those revenues are not given to the Board for the implementation of a state-mandated responsibility. Increased responsibility without support assures failure. The Board must turn to the legislature for resolution of this very real problem.

ARTHUR T. KEEFE, Jr., MD
Secretary

Licensing, Certification, Registration, and Identification

The responsibilities of the Board are diverse and everchanging. The Board of Medical Examiners not only licenses physicians and doctors of osteopathy but also certifies cardiac rescue technicians, aviation trauma technicians, and emergency medical technician-paramedics. New legislation in the spring of 1986 authorizes the Board to certify physician assistants and radiation technologists. The Board registers acupuncturists, psychiatrist assistants, and unlicensed medical practitioners. The Board will identify medical specialists when regulations are in effect. An overview of the workload of the Board is revealed in the following statistics.

Licensing The Board of Medical Examiners administers examinations and licenses medical doctors and doctors of osteopathy to practice medicine in Maryland only after an extensive review of credentials. Graduation from medical school must be verified by documentation sent directly from the school to the Board; in addition, the applicant must submit a copy of the MD or DO degree. The Board also requires verification from the American Medical Association's master file of U.S. physicians, verification of examination grades from the appropriate examining board, two physician references, verification of postgraduate training, and verification of licensure status in other states. Foreign medical school graduates are required to obtain certification from the Educational Council for Foreign Medical School Graduates (ECFMG), to obtain translation of the transcript and diploma, and must have graduated from a foreign medical school approved by the Board.

The Board's licensure and examination workload during the past three years is illustrated in Table 1.

Table 1: Physicians: Number of Applications, Examinations, Licenses, and Renewals FY 1984–1986

	1984	1985	1986
Candidates for licensure by endorsement	1,126	1,185	1,324
Applicants licensed by endorsement	1,116	1,152	1,222
Renewal	10,090	12,458	9,292
Applicants for licensure by examination	552	456	317
Candidates taking examination	463	398	251
Applicants licensed by examination	314	382	117
Duplicate licenses issued	45	37	46
Temporary licenses issued	2	10	5
Certification of licensure	457	353	411
Certified copies of grades	54	38	18
Foreign credentials evaluated	594	402	424
Reinstatement	80	151	156
Verification of license	4,082	4,551	4,993
Restricted licenses	31	28	27

Certification of Cardiac Rescue Technicians, Aviation Trauma Technicians, and Emergency Medical Technician-Paramedics Certification of advanced life support providers occurs through the Board of Medical Examiners upon the recommendation of the Maryland Institute for Emergency Medical Services Systems (MIEMSS). These individuals are required to attain a specific level of certified competence through successful completion of a training program that includes formal coursework, practical instruction, and a supervised field internship. In addition to certification, the Board reviews and approves all medical protocols used in the field. The Board is responsible for investigation of any protocol errors, and it reviews disciplinary actions that may occur at state and local

levels. Table 2 illustrates the number of CRTs certified in the past three years. The Board began certifying ATTs and EMT-Ps this year.

Job Descriptions and Registrations: Physician Assistants, Psychiatrist Assistants, and Acupuncturists A physician assistant (PA) is an individual who, after adequate training and having a job description approved by the Board, may be employed to perform certain duties that otherwise would be performed by a physician. Physician assistants must successfully complete the examination for physician assistants given by the national certifying board. The Physician Assistant Advisory Committee assists the Board with this program.

A psychiatrist assistant works under the supervision of a psychiatrist and has specialty training in psychiatry. He/she may perform duties that normally would be performed by a psychiatrist. The psychiatrist assistant must have a master's degree from an accredited college or university and have completed a Board-approved graduate program in mental health counseling or some other behavioral science that includes 1,000 hours of supervised clinical psychotherapy experience or baccalaureate degree from an accredited college or university and 4,000 hours of supervised clinical experience. The Psychiatrist Assistant Advisory Committee assists the Board with this program. Table 3 summarizes registrations and job descriptions during the last three fiscal years.

Acupuncturists are registered by the Board and required to perform acupuncture under the general supervision of a physician. Following the successful completion of approved acupuncture training and examinations, the acupuncturist stimulates a certain point or points on or near the surface of the human body by insertion of needles to prevent or modify the perception of pain control, for the treatment of ailments or conditions of the body. Assisting the Board in this process is the Acupuncture Advisory Committee. Table 4 illustrates the number of acupuncturists registered in the last three fiscal years.

Unlicensed medical practitioners are medical school graduates practicing medicine in a postgraduate training program or medical school students practicing medicine in a clinical clerkship. These residents/students were registered by the Board for the first time last year and are summarized in Table 5.

New Programs

This year, the Board will implement one new program, identification of medical specialists. Once the regulations have completed the approval process, physicians may become formally identified as medical specialists.

Medical Quality

In addition to the licensing, registration, certification, and identification process, the Board of Medical

Table 2. Emergency Medical Personnel

Certification	1984	1985	1986
CRTs	1,116	1,245	1,349
EMT-Ps	—	—	73
ATTs	—	—	12
EMPT-P Instructors			1
ATT Instructors			18
CRT Instructors			1
Decertifications			
CRTs			117
CRTs (resigned)			40

Table 3. Physician Assistants and Psychiatrist Assistants

Registrations	1984	1985	1986
Evaluation of job descriptions	214	213	313
Registration	83	95	63
Renewal	50	368	126
Delinquent renewal	14	—	—

Table 4. Acupuncturists

	1984	1985	1986
Registration	63	41	34
Renewal	—	104	102

Table 5. Unlicensed Medical Practitioners

	1986
Registration	1,300

Examiners is charged by law to assure that the individuals who are licensed, certified, registered, or identified perform in conformance with the laws and regulations governing each particular profession.

For physicians, assurance of medical quality occurs prior to licensure, reinstatement, or renewal. Falsification or misrepresentation on an application are grounds to deny licensure. If derogatory information surfaces and a physician is up for renewal, the Board may determine not to renew the license. The Board receives and investigates complaints about individuals who allegedly are practicing medicine without a license. Maryland physicians are continually screened by peers and the community. In addition, as part of the biennial renewal process, physicians are required to complete 100 hours of continuing medical education.

Each month, the Board of Medical Examiners exchanges information with the Federation of State Medical Boards and the American Medical Association on physicians who have been disciplined in other states and in Maryland. Information from other states is cleared through the computer to determine whether physicians, presently licensed or licensed in the past (nonrenewed), are on the "action" lists. If licensed, the physician's report is forwarded to the Commission on Medical Discipline. If not licensed, the information is maintained in an active file in case the physician should request reinstatement of license. The computer is also properly coded to draw attention to the file. The medical quality assurance process operates in the same manner to continually screen the acupuncturists, CRTs, ATTs, EMT-Ps, physician assistants, psychiatrist assistants, and unlicensed medical practitioners. The Board is charged with the investigation of all complaints regarding these paraprofessionals and refers findings and recommendations to the Commission on Medical Discipline. Table 6 delineates medical quality activity during 1985 and 1986.

Fiscal Data

Revenues and expenditures of the Board are shown on Table 7.

Planning

The Board annually submits to the Department of Health and Mental Hygiene a statement of planning objectives, a list of unmet needs, and a projection of future needs. These lists include new programs to enhance Board proficiency. Additional personnel and a computer system are considered by the Board to be essential at this time.

The revenues of the Board are sufficient to cover the expense of these needs, but since the revenues do not flow directly to the Board, the budget process routinely rejects the Board's requests as evidenced by the discrepancy between revenues and expenditures in Table 7.

Table 6. Medical Quality Assurance Actions

	1985	1986
Complaints received	42	68
Complaints closed	18	21
Complaints pending investigation	24	25
Formal hearings	3	1
Informal hearings	12	18
Cases closed	3	
Cases pending	7	
Verification requests	72	50
Verifications	36	34

Table 7. Revenues and Expenditures of the Board of Medical Examiners

	1984		1985		1986	
Board Revenues						
Examination fees	$106,475		$ 75,060		$ 79,010	
Registration fees	197,725		208,341		323,860	
Miscellaneous	29,011		23,300		25,973	
Renewals	507,409		635,650		459,495	
Total revenues		$840,620		$942,351		$888,338
Board Expenditures						
Salaries/benefits	179,177		251,968		204,023	
Examinations/hearings	84,995		82,071		58,012	
Office expenses	40,461		52,138		103,345	
Travel	4,144		5,701		6,028	
Subtotal	308,777		308,777		371,408	
Other Related Costs						
Indirect costs-Board	192,071		240,967		202,891*	
Commission expenditures	126,583		133,726		162,992	
Indirect costs-Commission	123,759		100,175		66,033*	
Subtotal	442,413		474,868		431,916	
Total expenditures		−751,190		−866,746		−803,324
Balance		$ 89,430		$ 75,605		$ 85,014

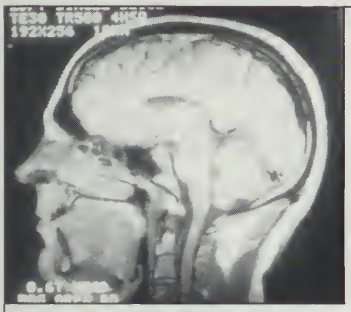
* Board and Commission paid $268,924 in indirect costs in 1986.

Public Accountability

The Board of Medical Examiners is not operating independently. As stated previously, there are many checks in the system to assure confidence.

Internally, the Board's procedures are working well. The Board is aware of the need to update methods in a careful and progressive manner. To maintain standards, the Board constantly monitors the statutes, revises regulations, requests administrative support when necessary, and maintains a vital link with centralized sources of information.

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Mar 19–21 Third Annual University of Maryland Contact Lens Symposium, The Omni Internation Hotel, Baltimore. Fee: $160 before Mar 1; $175 thereafter; 12 AMA Cat I credits.

Mar 26–27 Third National Traumatic Brain Injury Symposium, sponsored by the Speech-Communication Disorders Program, MIEMSS, University of Maryland Medical System. Info: R. Schwartz, 301-528-6101.

Visiting Professor Programs—Directory of speakers and topics available for area hospitals and other health care organizations. An administrative fee is charged. Info: 301-528-3956.

Visiting Practitioner Preceptorships—Opportunity for physicians to participate in clinical situations in the University of Maryland Hospital. Requires approval from clinical department heads. Hour-for-hour AMA Cat I credits.

Sep thru Jun—Departmental Rounds and Conferences—Hands-on opportunity for practicing physicians, including lectures and discussions, produced by clinical departments. Brochure available. Hour-for-hour AMA Cat I credits.

• • •

Miscellaneous Meetings

Two-year Child Therapists Course, **Psychoanalytic Principles as Applied to the Psychotherapy of Children,** sponsored by the DC Extension Division of the Baltimore-District of Columbia Institute for Psychoanalysis. Classes meet weekly in Washington on Tuesday evenings. CME approved Cat I. Info: write the Institute at 4545 42nd St. NW, Washington, DC 20016 (202-362-0331 or 362-2796).

Jan 15–16 Madness, Chaos, and Violence: Challenges to the Therapist. Part I Psychosis/ Suicide, sponsored by the Philadelphia Child Guidance Clinic, Family Therapy Training Center, Philadelphia, PA. Fee: $175 both sessions, $125 each session; students $125 both sessions, $75 each session. Info: K. Brennan, 215-243-2773.

Jan 15 Management of Systemic Sclerosis: Update on D-Penicillamine, Maryland Society for the Rheumatic Diseases. Meeting at the Johns Hopkins Club. Info and reservations: K. Krug, 301-366-0923.

Jan 17 MAFP Mini Conference—Surgical Update for Family Physicians, Sheraton Inner Harbour, Baltimore. Info: John B. Umhau, Jr., MD, 1204 Maryland Ave., Baltimore, MD 21201 (301-659-0640).

Jan 30 Gender Issues in Family Therapy and Family Life, sponsored by the Philadelphia Child Guidance Clinic Family Training Center, Philadelphia, PA. Fee: before 12/30, $65, thereafter $75; students $50. Info: K. Brennan, 215-243-2773.

Feb 19–20 Madness, Chaos, and Violence: Challenges to the Therapist. Part II Anorexia/ Violence, sponsored by the Philadelphia Child Guidance Clinic, Family Therapy Training Center, Philadelphia, PA. Fee: $175 both sessions, $125 each session; students $125 both sessions, $75 each session. Info: K. Brennan, 215-243-2773.

Feb 27–Mar 1 From Research to Relevance, Annual Meeting and CME, sponsored by VA Chapter, American Academy of Pediatrics and VA Pediatric Society. 15 AMA and 12 PREP credits. Info: VA Chapter, AAP, 1001 E. Main St., Ste 301, Richmond, VA 23219 (804-643-8130).

Mar 26 Review of the Genetic Influence on the Rheumatic Diseases, Maryland Society for the Rheumatic Diseases. Meeting at the Johns Hopkins Club. Info and reservations: K. Krug, 301-366-0923.

Mar 28 MAFP Mini Conference—Cardiovascular Update for Family Physicians, Tidewater Inn Easton. Info: John B. Umhau, Jr., MD, 1204 Maryland Ave., Baltimore, MD 21201 (301-659-0640).

Apr 3–5 Ophthalmologic Plastic Surgery, Orbital Disease, and Neuro-ophthalmology, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $315. Info: K. Parrott, 804-786-0494.

Apr 9–12 Annual Meeting, The Virginia Society of Otolaryngology-HNS, Tides Inn, Irvington, VA. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

Apr 10–12 Fifth Annual MCV Symposium: New Trends in Anesthesia, Medical College of Virginia CME Activity, Williamsburg Hilton. Fee: $275. Info: K. Martin, 804-786-0494.

Apr 10–12 Twenty-second Annual Pediatric Springfest, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $250. Info: K. Martin 804-786-0494.

Apr 23–25 Twenty-third Annual Postgraduate Course in Radiology: The Chest, Medical College of Virginia CME Activity, Richmond Marriott. Fee: $325. Info: K. Parrott, 804-786-0494.

Apr 24–26 Ninth Annual Conference on Emergency Medicine for the Primary Care Physician, Medical College of Virginia CME Activity, Fort Magruder Inn and Conference Center. Fee: $295. Info: K. Martin, 804-786-0494.

Apr 24–26 Seventh Annual Clinical Concerns in Primary Care: Office Cardiology, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $295. Info: K. Martin, 804-786-0494.

May 8–10 Sixth Annual MCV Cardiology Conference, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $325. Info: K. Martin, 804-786-0494.

May 13–17 MAFP Annual Meeting and Scientific Sessions, Sheraton Fountainebleau Inn &

Spa, Ocean City. Up to 30.5 AMA Cat I credits and up to 30.5 AAFP prescribed credits. Info: R. Bonsack MD, 301-659-0640.

May 14–17 Annual Meeting, Virginia Society of Ophthalmology, Sheraton Tysons Corner. Info: D. Strawderman, 4205 Dover Rd., Richmond, VA 23221 (804-353-2721).

May 18–19 Fourteenth Annual Hans Berger Day and EEG Symposium, Medical College of Virginia CME Activity, Baruch Auditorium, Egyptian Bldg., Medical College of Virginia Campus, Richmond, VA. Fee: $250. Info: K. Martin, 804-786-0494.

May 21 Update of Epidemiological Studies in Autoimmune Diseases, Maryland Society for the Rheumatic Diseases. Meeting at the Johns Hopkins Club. Info and reservations: K. Krug, 301-366-0923.

May 23–25 Gynecologic Urology and Pelvic Surgery, Medical College of Virginia CME Activity, Williamsburg Hospitality House. Fee: $260. Info: K. Martin 804-786-0494.

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The Johns Hopkins Medical Institutions

All courses at the Turner Auditorium Building unless otherwise indicated. Sponsored Continued Education Activities for 1986-87. Info: Office of Continuing Education, 720 Rutland Ave., Turner Auditorium, Baltimore, MD 21205 (301-955-5880).

Jan 16 Vascular Disorders of the Retina and Choroid. Fee: $185, $100 residents and fellows; 8 AMA Cat I credits. Info: D. Heydinger, 301-955-6046.

Feb 19–20 Sex Offenders: Criminals or Patients? Fee: $200 before 1/31, $225 thereafter; 13 AMA Cat I credits, 1.3 CEU. Info: C. Sentman, 301-955-6085.

Mar 12–13 Positron Emission Tomography and the Chemistry of Mental Illness. Fee: $275, residents and fellows $175; 15 AMA Cat I credits. Info: P. Macedonia, 301-955-6085 or J. Buchanan, 301-955-8582.

Mar 23–24 Non-Occupational Exposure to Asbestos in Schools and Other Buildings: Risk Assessment and Management. Fee: $350, Johns Hopkins Health Associates $275; 12.5 AMA Cat I credits, 1.25 CEU, 2 ABIH. Info: J. Corn, 301-955-2609.

Apr 6–11 Pediatric Trends 1987. Fee: $500, residents and fellows $350; 45 AMA Cat I and 45 PREP American Academy of Pediatrics credits. Info: C. Sentman, 301-955-6085 or E.M. Sills MD, Park 207, Johns Hopkins Hospital, 600 N. Wolfe St., Baltimore, MD 21205.

May 22 Seventeenth Anniversary Meeting of the Retinal Vascular Center—Clinical Trials and the Practice of Ophthalmology. Fee: $190, residents and fellows $100. Info: D. Heydinger 301-955-6046.

Johns Hopkins Medical Grand Rounds: audiocassettes, slides, and booklet. 30 topics and 40 AMA Cat I credits/year. Contact 301-955-3988, Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205.

Ophthalmic Electrophysiology Technician Training Course (ongoing 1-week course by appointment), The Wilmer Eye Institute, Baltimore. Info: C.M. Kearney.

Diagnostic Cytopathology for Pathologists, 1987 Postgraduate Institute: February to May 1987, subspecialty residency in Clinical Cytopathology, compressed into two courses, both of which must be taken:

Feb–Apr Home Study Course A—personal reading and microscopic study at own laboratory in preparation for Course B.

Apr 27–May 8 In-residence Course B—lecture series, laboratory study, and clinical experience at the Johns Hopkins Medical Institutions, Baltimore, MD, USA.

Designed solely for pathologists who are certified (or qualified for certification) by the American Board of Pathology or its international equivalent, this institute is an intensive refresher in all aspects of Clinical Cytopathology with time devoted to newer developments and techniques, special problems, and recent applications including *immunodiagnosis* and *needle* aspiration. Loan slide set with texts (Course A) will be sent each participant within the US and Canada for home study during Feb through Apr before Course B in Baltimore on April 27 to May 8. Participants outside the US and Canada must make arrangements to study Course A before Course B. *The entire course is given in English.*

Application and completed preregistration is advised ASAP: preregistration must be completed before **March 27, 1987,** unless by special arrangement. Info: John K. Frost MD, 604 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA.

PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of the State of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to the Physician Placement Service, 1211 Cathedral St., Baltimore, MD 21201; telephone 1-301-539-0872.

Physicians wishing to locate in Maryland are invited to submit a resumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities which might be available in Maryland.

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Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

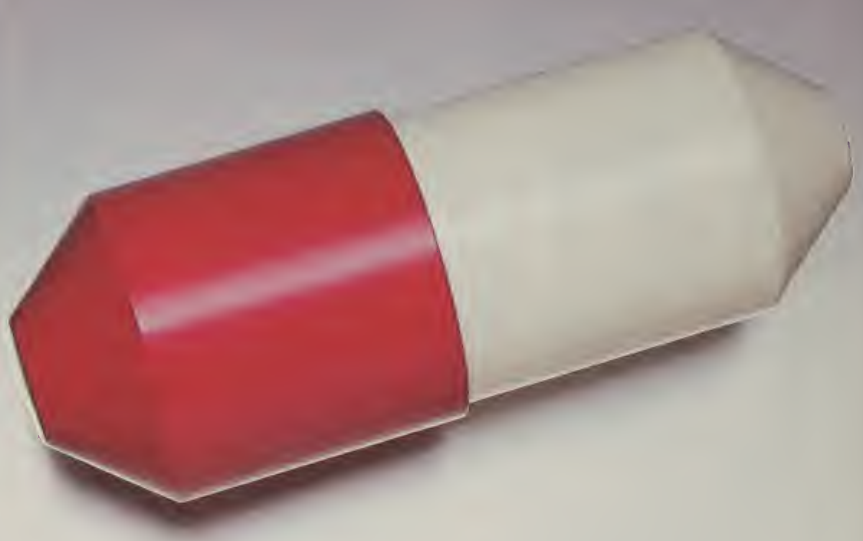
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ABETALIPOPROTEINEMIA
Wilson DJ; Green WR. Systemic diseases with retinitis pigmentosa-like changes. 1011.
ABNORMALITIES
Khoury MJ; Weinstein A; Panny SR; Holtzman NA; Lindsay PK; Warthen FJ; Street NA; Robertson MO; Farrell KP; Eisenberg M. Epidemiology of sentinel birth defects in Maryland, 1984. 837.
ACADEMIC MEDICAL CENTERS
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Deneshvar A. Autologous transfusion: the treatment of choice. 473.
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Maryland. Office of Disease Control and Epidemiology. Newsletter. 537, 641, 731.
ACTIVITIES OF DAILY LIVING
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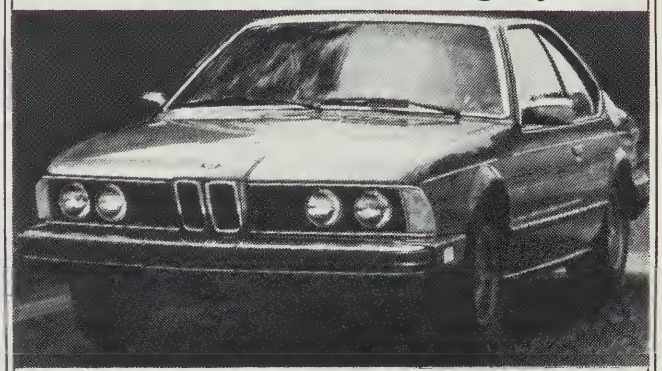
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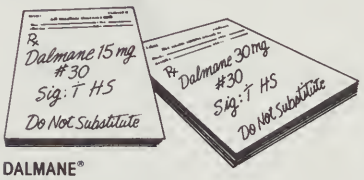
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sleep that satisfies

15-mg/30-mg
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References: 1. Kales J, *et al: Clin Pharmacal Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacal Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacal Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacal Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Sac 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychapharmacal 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacal Ther 21*:355-361, Mar 1977.



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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insamnia characteriz by difficulty in falling asleep, frequent nacturnal awakeni and/or early morning awakening; in patients with recurri insomnia or poar sleeping habits; in acute ar chranic m situatians requiring restful sleep. Objective sleep laborat data have shawn effectiveness for at least 28 consecuti nights of administratian. Since insamnia is aften transie and intermittent, prolonged administration is generally necessary or recammended. Repeated therapy should be undertaken with apprapriate patient evaluation.

Contraindications: Knawn hypersensitivity to flurazepc pregnancy. Benzodiazepines may cause fetal damage administered during pregnancy. Several studies sugge increased risk of congenital malfarmatians assaciatec benzodiazepine use during the first trimester. Warn patients of the potential risks ta the fetus shauld the passibility of becoming pregnant exist while receiving flurazepam. Instruct patients to discantinue drug priar ta becaming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients abaut passible cambined effects with alcohol and other CNS depressants. An additive effect may accur if alcahal is consumed the day following use for nighttime sedation. This potential may exist far several days following discontinuation. Cautian against hazardous occupations requiring complete mental alertness (*e.g.*, aperating machinery, driving). Patential impairment of performance of such activities may occur the day follawing ingestian. Nat recammended far use in persons under 15 years af age. Withdrawal symptams rarely reparted; abrupt discontinuatian should be avoided with gradual tapering af dasage far thase patients an medicatian far a pralanged period af time. Use caution in administering to addiction-prone individuals ar thase who might increase dasage.

Precautions: In elderly and debilitated patients, it is recammended that the dasage be limited ta 15 mg ta reduce risk af aversedatian, dizziness, confusian and/ar ataxia. Cansider potential additive effects with other hypnotics or CNS depressants. Emplay usual precautions in severely depressed patients, ar in thase with latent depression or suicidal tendencies, ar in those with impaired renal ar hepatic functian.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have accurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disarientation and cama, prabably indicative af drug intolerance or overdosage, have been reported. Also reported headache, heartburn, upset stomach, nausea, vamiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehensian, irritability, weakness, palpitatians, chest pains, body and jaint pains and GU complaints. There have alsa been rare accurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in facusing, blurred vision, burning eyes, faintness, hypotension, shortness af breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivatian, anorexia, eupharia, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, tatal and direct bilirubins, and alkaline phosphatase; and paradaxical reactians, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in same patients. *Elderly ar debilitated patients:* 15 mg recammended initially until response is determined.

Supplied: Capsules containing 15 mg ar 30 mg flurazepam HCl.

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#1 FOR SLEEP

After more than 15 years of use, it's #1 for sleep that satisfies. Patients are satisfied because they fall asleep fast and stay asleep till morning.[1-8] And *you're* satisfied by the exceptionally wide margin of safety.[7-9] As always, caution patients about driving or drinking alcohol.

Please see adjacent page for references and summary of product information.

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